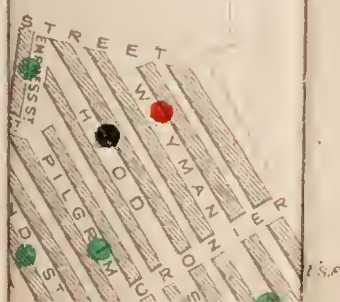


The Grange

PIER

Lighthouse



PLAN OF THE BOROUGH OF SUNDERLAND

The dotted lines show the divisions of the Borough into Registration Sub-Districts, whose Names are indicated as follows:—

S.E.—Sunderland East; **S.W.**—Sunderland West; and **S.N.**—Sunderland North.

Showing the Deaths from Diarrhoea and Consumption, and the cases of Diphtheria, Enteric Fever, and Continued Fever during the year 1913.

	Estimated Population.
Sunderland East Sub-District	53,824
Sunderland West Sub-District	63,629
Sunderland North Sub District	34,927
Whole Borough	<u>152,380</u>

Cases of Enteric and Continued Fevers in RED.
Cases of Diphtheria in YELLOW.
Deaths from Diarrhoea in GREEN.
Deaths from Consumption in BLACK.





County Borough of Sunderland.

ANNUAL REPORT

ON THE

**Health and Sanitary Condition
of Sunderland,**

FOR THE YEAR 1913.



HENRY RENNEY, D.Hy., D.P.H., M.D., B.S.,

Fellow of the Society of Medical Officers of Health.

**Late President of the Northern Branch of the Society of Medical
Officers of Health.**

Member of the Royal Sanitary Institute.

**Medical Superintendent of the Borough Sanatorium,
Medical Officer of Health.**



SUNDERLAND :

SUNDERLAND POST CO., LTD., WEST WEAR STREET.

—
1914.



Officials of the Health Department.

MEDICAL OFFICER OF HEALTH AND MEDICAL SUPERINTENDENT OF THE BOROUGH SANATORIUM:

HENRY RENNEY, D.Hy., D.P.H., M.D., B.S. (Durh.)

DEPUTY MEDICAL OFFICER OF HEALTH:

ROBT. S. HUBBERSTY, M.D., C M. (Edin.), M.R.C.S. (Eng.).

PUBLIC ANALYST:

JOHN T. DUNN, D.Sc., F.I.C.

BACTERIOLOGIST:

H. J. HUTCHENS, D.S.O, M.A., M.R.C.S., L.R.C.P., D.P.H. (Oxon.)

OFFICIALS OF THE BOROUGH SANATORIUM:

MATRON - - - Miss E. O'KANE.

ENGINEER - - - W. S. OATES.

INSPECTOR OF NUISANCES:

JOHN PENNOCK (Cert. San. Inst.)

DEPUTY INSPECTOR OF NUISANCES AND INSPECTOR UNDER THE SHOPS' ACT:

JAMES S. WATSON (Cert. San. Inst.)

MEAT AND FOODS INSPECTOR:

THOS. H. DOWNES (Cert. San. Inst.).

ASSISTANT INSPECTORS OF NUISANCES:

ROGER LEE (Cert. San. Inst.)	GEORGE REED (Cert. San. Inst.)
CHAS. BROUGHTON, „	FRED DYER, „
FRED OATES, „	WM. ROBSON, „

Officials of the Health Department.—*Contd*

CLERK:

JAMES W. SOLLEY.

ASSISTANT CLERKS:

JAMES W. H. MILLER.

N. ADOLPHUS MARLEE.

NICHOL L. CLASPER.

ERNEST POWELL.

DISINFECTOR:

THOS. S. BLAND.

INSPECTOR OF DRAINS AND SANITARY FITTINGS FOR NEW HOUSES:

FRANK E. RAIN (Cert. San. Inst.)

HOUSING SUPERINTENDENT, HARRISON BUILDINGS

AND ASSISTANT SANITARY INSPECTOR:

JOSEPH D. WARD (Cert. San. Inst.)

LADY HEALTH VISITORS:

Miss M. E. BARBER (Cert. San. Inst. and C.M.B.).

Miss N. RAINE (Cert. San. Inst. and C.M.B.).

Miss A. BROCK (Cert. San. Inst. and C.M.B.).

INDEX.

	PAGE.
Abatement of Nuisances	111
Acreage of the Borough	1
Analysis of Food and Drugs.....	82-88, 108, 127-128
Appendix of Vital and Sanitary Statistics.....	89-104
 Bacteriological Examinations	48-54
Births and Birth-Rate	2
Births, Notification of	58
Borough Sanatorium Report	44-47
Babies' Welcomes	62
 Chart No. 1 Showing the General Death-Rate in Sun- derland from 1866 to 1913 per 1,000 of the population	3
„ „ 2 Showing the principal causes of Death during the year 1913	7
„ „ 3 Death-Rate in Sunderland from Tuber- culous Disease per 1,000 of the population. 1885-1913	13
„ „ 4 Pneumonia and Consumption, Death- Rate per 1,000 of the population in Sun- derland. 1873-1913	15
„ „ 5 Death-Rate from Pneumonia and Con- sumption England and Wales per 1,000 of the population, from 1884 to 1911.....	17
„ „ 6 Death-Rate from Pneumonia per 1,000 of the population in Sunderland, from 1873- 1913	19
„ „ 7 Showing the Death-Rate from all Respiratory Diseases (except Consumption and Croup) per 1,000 of the population for the years 1882 to 1913	21

	PAGE.
Chart No. 8 Scarlet Fever. Attack-Rate per 1,000 of the population. 1885-1913	25
„ „ 9 Scarlet Fever. Fatality per cent. of Notified Cases. 1885-1913	27
„ „ 10 Scarlet Fever. Percentage of Notified Cases admitted to Sanatorium or Hospital. 1885-1913	29
„ „ 11 Diphtheria and Membranous Croup Attack Rate per 1,000 of the population. 1885-1913	31
„ „ 12 Diphtheria and Membranous Croup Fatality Rate Per Cent. of Cases. 1885-1913.....	33
„ „ 13 Whooping Cough Death-Rate per 1,000 of the Population. 1873-1913	35
„ „ 14 Measles. Death-Rate per 1,000 of the population. 1873-1913	37
„ „ 15 Enteric and Continued Fever. Attack Rate per 1,000 of the population. 1886-1913 ...	39
„ „ 16 Enteric and Continued Fever Fatality per cent. of Cases Notified. 1886-1913.....	41
„ „ 17 Cancer (all forms) Death-Rate per 1,000 of the population from 1874-1913	55
„ „ 18 Death-Rate of Children under one year, per 1,000 Births, from 1885-1913	59
„ „ 19 Comparison of the Infantile Mortality in the East, West, and North Districts, from 1905-1913	67
„ „ 20 Diseases of the Nervous System, from 1874-1913	69
Cleansing Superintendent's Report	76-77
Common Lodging Houses	107
Consumption Sanatoria	72
Consumption Notifications	92
Dairies, Cow Sheds and Milkshops.....	118
Deaths and Death-Rate	2-6
Density of Population	1
Diarrhœa, Deaths from	43

	PAGE.
Diphtheria	23-24
Disinfecting Work	126
Drain Testing (New Houses)	72
Drains Tested by Sanitary Inspectors	106
Enteric Fever	43, 92
Erysipelas	9, 92
Factories, Workshops and Workplaces.....	79-81
Food and Provision Inspection	107
Harrison Buildings, Superintendent's Report.....	73-75
Health Visitors' Report	61-65
Hospital, the Isolation	44-47
Housing, Town Planning, &c., Act, 1909.....	73, 106-107, 130-141
Infantile Mortality	57-58, 66, 71
Infectious Diseases—Deaths from, 1904-1913.....	43
„ „ Cases Notified, 1904-1913	9
Inspector of Nuisances, Report of the.....	105
Magisterial Proceedings	129
Measles	43
Meteorological Observations	78
Midwives, Supervision of	63-64
Milk Analyses	82-88, 127-128
Milk Samples, Bacteriological Examination of.....	50
New Houses, Drains Tested	72
Notices Served for the Abatement of Nuisances.....	111
Notifications of Infectious Diseases	9
Notification of Births	58
„ Consumption	92
Offensive Trades	119
Outworkers	108

STATISTICAL SUMMARY.

Area of the Borough	...	...	...	3,357 acres.
Population (Census, 1911)	...	...	...	151,162
„ (Estimated, 1913)	...	...	...	152,380
Births Registered in 1913	...	...	...	4,792
Birth-rate per 1,000 Inhabitants	...	...	...	31·4
Deaths Registered in 1913	...	...	...	2,769
Death-rate per 1,000 Inhabitants...	...	...	...	18·1
„ from Zymotic Diseases*	...	...	...	2·14
„ from Enteric Fever	...	...	...	0·02
„ from Scarlet Fever	...	...	...	0·12
„ from Phthisis...	...	...	...	1·13
„ Infantile, per 1,000 Births	...	...	...	135
„ „ 96 Great Towns	...	...	...	117

* “Zymotic Diseases” includes Smallpox, Measles, Typhus Fever, Scarlet Fever, Whooping-cough, Diphtheria, and Membranous Croup, Enteric Fever, all Diarrhoeal Diseases and Dysentery.

County Borough of Sunderland.

HEALTH DEPARTMENT.

ANNUAL REPORT

FOR THE YEAR 1913.

POPULATION.

The population estimated to the middle of 1913 was 152,380.

Table A shows the estimated population in each of the three registration sub-districts of the Borough, the area of these districts, and the number of people per acre.

TABLE A.

	Population.	Area in Acres.	Density of Population per Acre.
Sunderland East.....	53,824	897	60·0
„ West	63,629	1,724	36·9
„ North	34,927	736	47·4
Borough	152,380	3,357	45·4

CENSUS POPULATION.

The Census population of 1911 was 151,162; 72,564 being males, and 78,598 females.

The Census populations of the various Wards were as follows:—

Bishopwearmouth	9,519	Monkwearmouth-Shore	9,085
Bridge	12,302	Pallion.....	9,145
Central.....	8,376	Park.....	9,287
Colliery	7,332	Roker	9,965
Deptford	9,998	St. Michael's	7,723
East	8,698	Sunderland	9,336
Hendon	8,669	Thornhill	12,472
Monkwearmouth.....	7,928	West	11,327

BIRTHS.

The Births registered during the year 1913 numbered 4,792, the birth-rate per 1,000 of the population being 31·4. The illegitimate births numbered 159, and were 3·3 per cent. of the total births.

The rate for 1913 is a decimal point higher than that for 1912, and is 6·3 per 1,000 higher than the average birth-rate of the 96 great towns, the figure for the latter being 25·1.

TABLE B.

Showing the number of Births of Males and Females, together with the Birth-rates for the ten years, 1903 to 1912.

Year.	Births Registered.			Birth-rate.
	Males.	Females.	Total.	
1904	2654	2540	5194	35·1
1905	2615	2608	5223	35·2
1906	2786	2589	5375	36·1
1907	2746	2584	5330	35·7
1908	2628	2552	5180	34·6
1909	2493	2272	4765	31·7
1910	2337	2245	4582	30·3
1911	2327	2192	4519	29·8
1912	2414	2335	4749	31·3
1913	2444	2348	4792	31·4

THE DEATH-RATE.

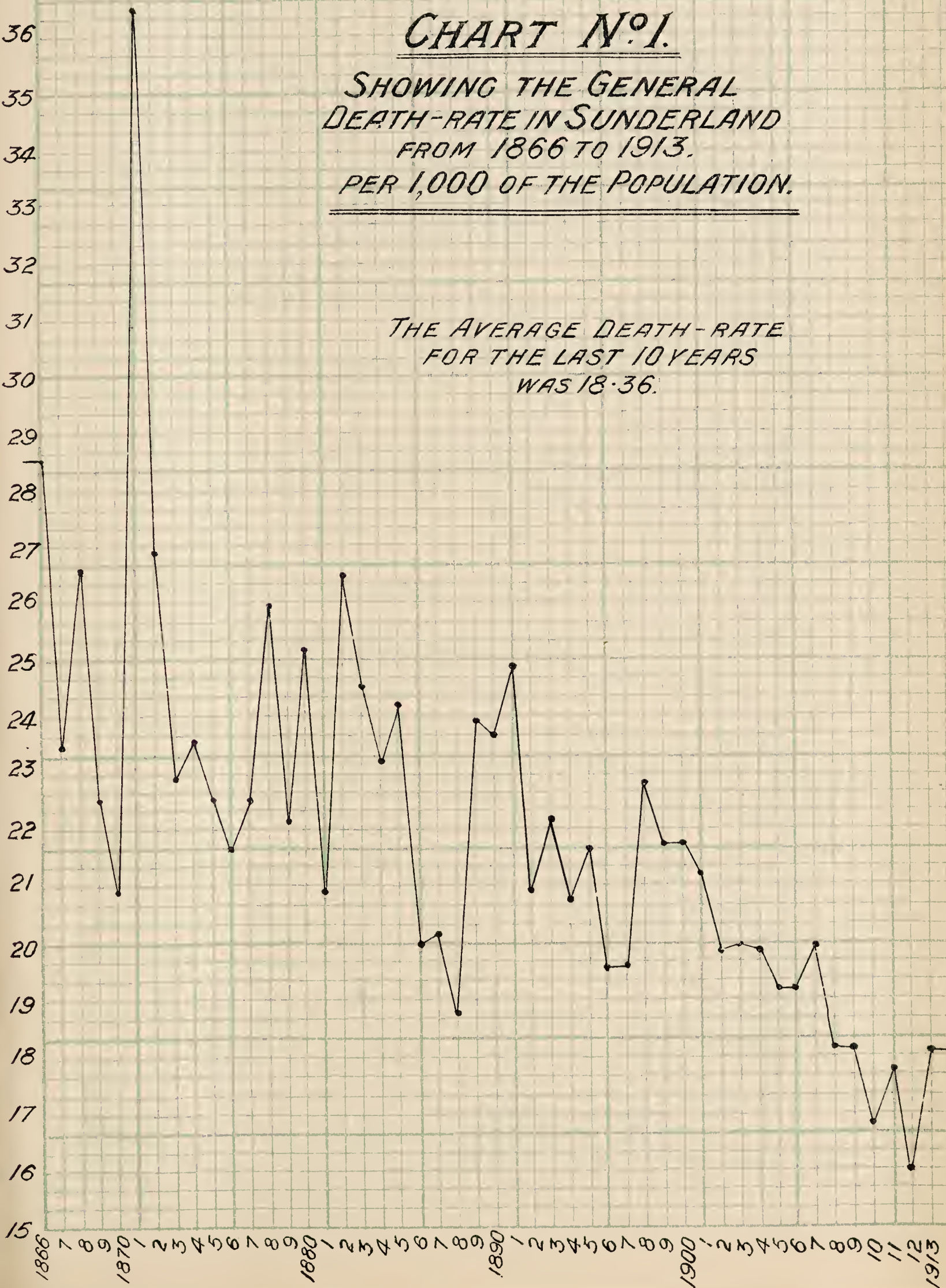
The death-rate for the year 1913 amounted to 18·1 per 1,000 of the estimated population. That for 1912 was 15·9, so that there has been an increase of 2·2. With the exception of Gateshead and Tyne-mouth, there has been an increased death-rate in all the neighbouring boroughs for the year now under revision. The principal factor in Sunderland's higher rate is diarrhœa, there having been 145 more deaths from this cause than in 1912. Diarrhœa was epidemic in the Borough from the beginning of August to the beginning of November, an unusually long period, the weather for the whole of this time being warmer than is generally the case, and the rainfall was below the

Number
per 1,000
37

CHART N^o 1.

*SHOWING THE GENERAL
DEATH-RATE IN SUNDERLAND
FROM 1866 TO 1913.
PER 1,000 OF THE POPULATION.*

*THE AVERAGE DEATH-RATE
FOR THE LAST 10 YEARS
WAS 18.36.*



average. These two factors always produce an increased mortality from diarrhoea. The Analysis of the Principal Causes of Death, on page 6 shows that there was a slightly increased mortality in respect of several other diseases, which, taken together, accounts for the higher figure for 1913.

That this figure is not quite reliable I am aware, for I am certain that the population of Sunderland is underestimated for the year 1913. The estimate is calculated on the census figures for the year 1911. In that year the population had very much decreased owing to the large exodus from the Borough on account of stagnation in trade. The most of these people have either returned, or their places have been taken by others, for nearly every house which was vacant in 1911 is now occupied. I am convinced that the population should amount to several thousands more than the estimate, and that therefore the death-rate should be lower than the above figure.

The death-rate for the 96 great towns was 14·3 in 1913, so that our death-rate is 3·8 higher.

The death-rates from 1873 to 1913 are given in the Table below, and are shown in graphic form on Chart No. 1, page 3 from 1886 to 1913. Here it will be seen what a great reduction in mortality has taken place during the greater part of this period.

The deaths registered during the year numbered 2,769.

The following Table gives the death-rate per 1,000 since 1873:—

Death-rates per 1,000 of the Population (1873—1913).

Year.	Rate per 1000.	Year.	Rate per 1000.	Year.	Rate per 1000.
1873	... 22·7	1887	... 20·3	1901	... 21·3
1874	... 23·6	1888	... 18·7	1902	... 19·8
1875	... 22·4	1889	... 23·9	1903	... 20·1
1876	... 20·8	1890	... 23·7	1904	... 19·8
1877	... 22·5	1891	... 24·8	1905	... 19·2
1878	... 25·5	1892	... 20·8	1906	... 19·2
1879	... 21·8	1893	... 22·4	1907	... 19·9
1880	... 24·4	1894	... 20·7	1908	... 18·3
1881	... 20·9	1895	... 21·7	1909	... 18·3
1882	... 26·4	1896	... 19·6	1910	... 16·9
1883	... 24·7	1897	... 19·7	1911	... 17·8
1884	... 23·3	1898	... 22·8	1912	... 15·9
1885	... 24·3	1899	... 21·7	1913	... 18·1
1886	... 20·0	1900	... 21·7		

The death-rates in the quarters during 1913 were as follows:—

1st quarter—Deaths	769	.....Rate	20·2	per 1000.
2nd „ „	680	.....„	17·8	„
3rd „ „	604	.....„	15·8	„
4th „ „	716	.....„	18·8	„

The death-rates for the year 1913 in the Registration Sub-Districts of the Borough were as follows:—

Sunderland East.....	20·3	per 1000.
Sunderland West	16·7	„
Sunderland North	17·4	„

ANALYSIS OF THE PRINCIPAL CAUSES OF DEATH.

The following table shows the number of deaths and the death-rate per 1,000 from the Principal Causes, together with the increase or decrease in the death-rate of each compared with the previous year:—

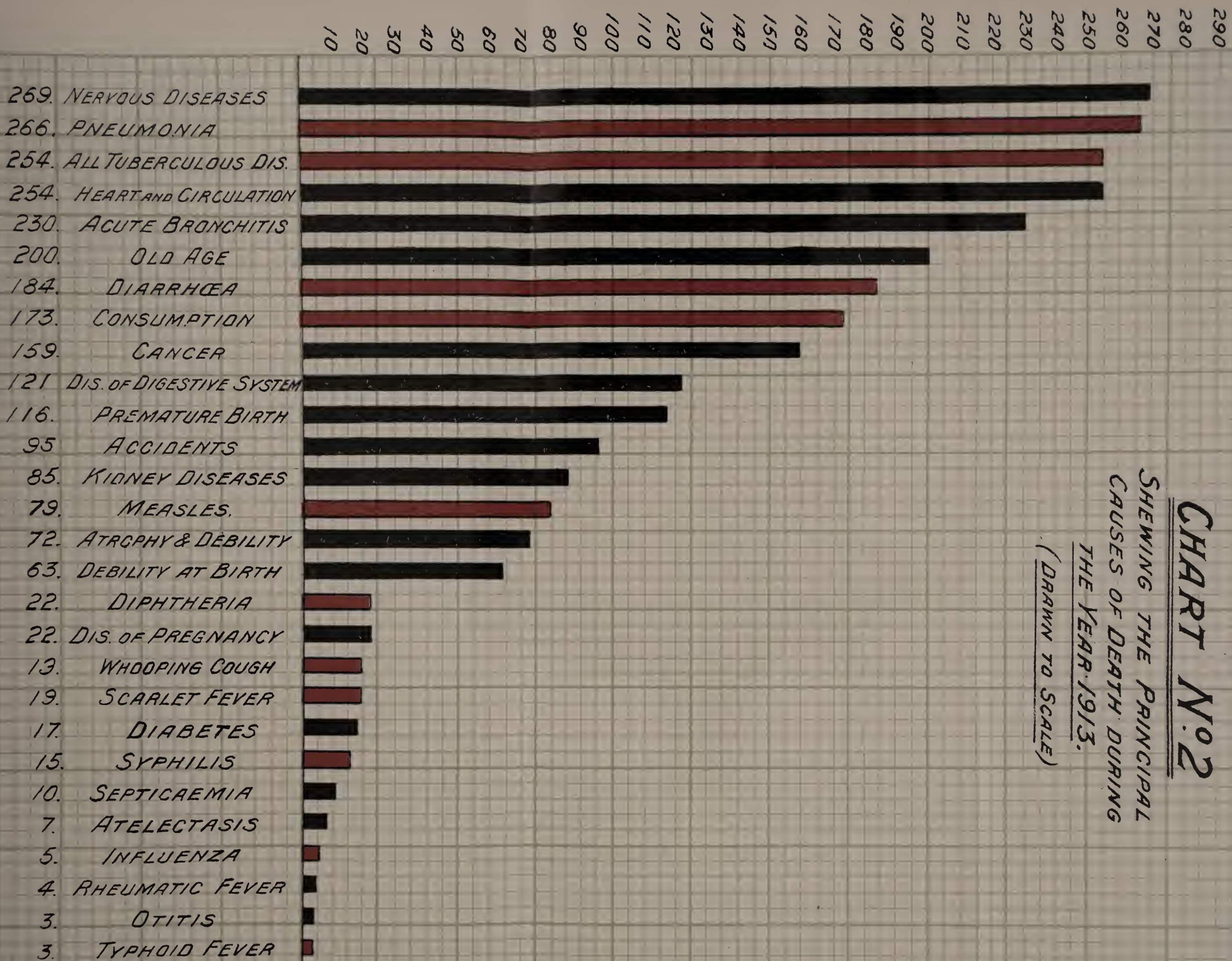
CAUSE OF DEATH.	Number of Deaths in 1913.	Death-rate per 1,000 of the Population in 1913.	Increase or decrease of the Death-rate per 1,000 of the Population compared with that for the year 1912.
*Nervous Diseases	269	1·76	Increase 0·48.
Acute Bronchitis	230	1·50	„ 0·09.
All Tuberculous Diseases	254	1·66	Decrease 0·18.
Heart and Circulation	254	1·66	„ 0·08.
Pneumonia.....	266	1·74	Increase 0·36.
Diarrhoeal Diseases	184	1·20	„ 0·94.
Old Age	200	1·31	„ 0·23.
Consumption	173	1·13	Decrease 0·09.
Cancer.....	159	1·04	Increase 0·20.
Premature Birth	116	0·76	Decrease 0·01.
Whooping Cough	19	0·12	„ 0·15.
Debility at Birth	63	0·41	Increase 0·08.
Atrophy, Debility & Marasmus.	72	0·47	„ 0·07.
Kidney Diseases	85	0·55	„ 0·11.
Measles	79	0·51	„ 0·06.
Chronic Bronchitis	43	0·28	Decrease 0·02.
Diphtheria	22	0·14	No Change.
Other Diseases of Stomach, etc	30	0·19	Increase 0·04.
Cirrhosis of Liver	21	0·14	„ 0·06.
Anæmia and Leucocythæmia ...	8	0·05	„ 0·02.
Rheumatic Fever and Rheumatism of the Heart	6	0·04	Decrease 0·07.
Appendicitis	10	0·06	No Change.
Scarlet Fever.....	19	0·12	Increase 0·11.
Typhoid Fever	3	0·02	No Change.
Diabetes	17	0·11	Decrease 0·03.
Ulcer of Stomach & Duodenum.	11	0·07	No Change.
Obstruction of Intestine	14	0·09	Decrease 0·03.

* “Nervous Diseases” includes Convulsions, Simple Meningitis, Encephalitis, Apoplexy, Softening of the Brain, Hemiplegia, General Paralysis of the Insane, other forms of Insanity, Chorea, Cerebral Tumour, Epilepsy, Laryngismus Stridulus, Locomotor Ataxia, Paraplegia, and other ill-defined diseases of the Nervous System.

CHART No 2

SHOWING THE PRINCIPAL
CAUSES OF DEATH DURING
THE YEAR 1913.

(DRAWN TO SCALE)



INFECTIOUS DISEASES.

Showing the number of NOTIFICATIONS of Infectious
for the last ten years.

Year.	Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Typhus Fever.	Continued Fever.	Erysipelas.	Puerperal Fever.	Poliomyelitis.
1904	34	198	74	128	...	9	117	4	...
1905	2	184	170	139	...	6	105	12	...
1906	...	283	231	134	...	7	106	7	...
1907	1	498	206	92	...	6	96	2	...
1908	1	325	189	132	...	1	95	1	...
1909	...	596	229	96	...	2	135	7	...
1910	...	432	161	58	...	2	163	9	...
1911	...	431	145	57	...	1	116	5	...
1912	...	228	161	45	8	...	60	10	...
1913	...	779	181	40	...	2	105	2	1
Average	4	395	175	92	...	4	110	6	...

TABLE E.—The following Table shows the death-rates per 1,000 of the also Birth Rates and Infantile Mortality in the

CAUSE OF DEATH.	Bishopwearmouth Ward.	Bridge Ward.	Central Ward.	Colliery Ward.	Deptford Ward.	East Ward.	Hendon Ward.	Monkwearmouth Ward.
Population (est. middle 1913).....	9412	12148	8123	7129	9877	8500	9369	8421
Births	285	455	277	253	342	325	269	234
Birth-rate	30·3	37·4	34·1	35·5	34·6	38·2	28·7	27·8
Deaths—All Causes.....	170	252	229	129	183	201	132	151
Death-rate	18·05	20·74	28·19	18·10	19·02	23·64	14·08	17·92
Deaths under One year	40	65	48	41	48	58	31	31
Infantile Mortality	140	142	173	162	140	178	115	132
CAUSE OF DEATH :—								
Nervous Diseases	1·91	1·97	2·83	1·96	1·01	1·41	1·28	1·78
Bronchitis	2·12	1·65	3·14	1·40	1·72	2·82	1·70	1·30
Consumption	0·95	1·65	1·72	0·84	1·01	1·18	1·07	1·07
Other Tuberculous Diseases	0·21	0·66	0·00	0·84	0·30	0·82	0·43	0·59
Heart and Circulation.....	1·38	1·65	2·71	1·12	1·72	2·00	0·43	1·30
Pneumonia.....	1·06	2·30	2·95	1·12	2·43	3·88	0·96	1·90
Diarrhoea	1·27	0·99	2·21	3·08	1·62	2·00	1·07	1·78
Cancer	1·06	0·90	1·11	0·84	0·91	0·47	1·17	1·19
Premature Birth	1·27	1·48	0·86	0·70	0·91	1·06	0·11	0·47
Debility at Birth and Atrophy and Marasmus	0·42	0·82	1·60	1·40	1·21	0·59	0·43	0·83
Kidney Diseases	0·85	0·41	0·86	0·98	0·50	0·59	0·64	1·07
Diseases of Digestive System	0·53	0·99	1·23	0·28	1·01	0·94	0·75	0·59
Old Age	2·23	1·48	2·46	0·56	0·91	1·65	1·17	0·59
Measles	0·42	1·15	0·37	0·14	1·01	0·82	0·75	1·07
Scarlet Fever	0·32	0·08	0·00	0·14	0·10	0·23	0·21	0·12
Whooping Cough	0·32	0·08	0·12	0·00	0·30	0·00	0·43	0·00
Diphtheria	0·11	0·08	0·00	0·28	0·10	0·12	0·11	0·24
Typhoid Fever	0·00	0·00	0·12	0·00	0·00	0·00	0·11	0·00

population from ALL CAUSES and from the PRINCIPAL DISEASES
several Wards of the Borough, for the year 1913.

Monkwearmouth- Shore Ward.	Pallion Ward.	Park Ward.	Roker Ward.	Saint Michael's Ward.	Sunderland Ward.	Thornhill Ward.	West Ward.	CAUSE OF DEATH.
8696	9285	9202	10681	7633	9218	13249	11437	Population (est. middle 1913).
359	354	291	240	193	379	242	294	Births.
41·3	38·1	31·6	22·5	25·3	41·1	18·3	25·7	Birth-rate.
198	164	152	132	148	212	148	163	Deaths—All Causes.
22·77	17·66	16·52	12·35	19·39	23·00	11·17	14·25	Death-rate.
62	31	34	25	20	60	24	28	Deaths under One year.
173	88	117	104	104	159	99	95	Infantile Mortality.
2·53	1·51	1·96	1·31	2·10	1·36	1·06	1·48	CAUSE OF DEATH :— Nervous Diseases.
1·84	1·61	2·17	1·03	1·57	3·47	0·60	1·31	Bronchitis.
1·26	1·18	1·41	0·65	1·05	1·95	0·83	0·52	Consumption.
1·15	1·18	0·11	0·65	0·13	0·54	0·07	0·87	Other Tuberculous Diseases.
2·53	2·91	1·09	1·12	3·53	1·19	1·28	1·39	Heart and Circulation.
1·95	1·83	1·19	0·56	1·96	2·49	0·83	1·22	Pneumonia.
2·18	1·29	0·65	0·28	0·52	1·52	0·15	0·61	Diarrhoea.
1·38	1·40	0·65	0·94	1·96	0·65	1·13	1·05	Cancer.
1·15	0·54	0·54	0·37	0·39	1·29	0·38	0·61	Premature Birth.
1·61	0·97	1·19	0·47	0·78	1·08	0·45	0·79	Debility at Birth and Atrophy and Marasmus.
0·46	0·21	0·76	0·75	0·78	0·65	0·45	0·44	Kidney Diseases.
0·34	0·43	0·87	0·94	0·78	1·19	0·60	1·05	Diseases of Digestive System.
1·15	1·29	1·09	1·31	1·31	1·41	1·28	1·05	Old Age.
0·69	0·21	0·43	0·19	0·26	0·22	0·15	0·17	Measles.
0·11	0·00	0·00	0·00	0·13	0·22	0·15	0·17	Scarlet Fever.
0·11	0·00	0·22	0·09	0·13	0·22	0·00	0·00	Whooping Cough.
0·11	0·43	0·00	0·75	0·00	0·00	0·07	0·35	Diphtheria.
0·00	0·00	0·00	0·00	0·13	0·00	0·00	0·00	Typhoid Fever.

CHART N^o3.

DEATH-RATE IN SUNDERLAND
FROM TUBERCULOUS DISEASE
PER 1,000 OF THE POPULATION
1885-1913.

RATE PER 1,000

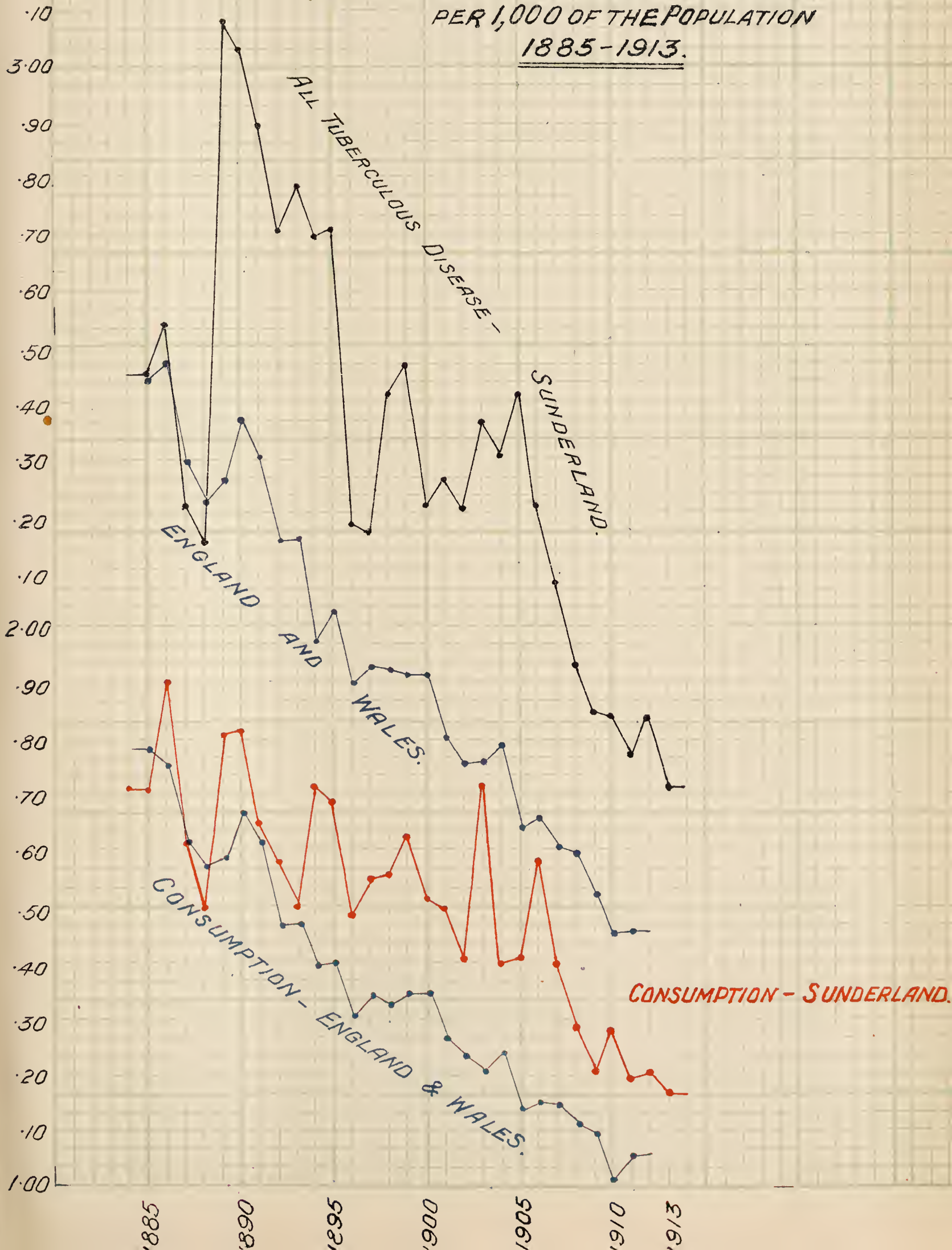
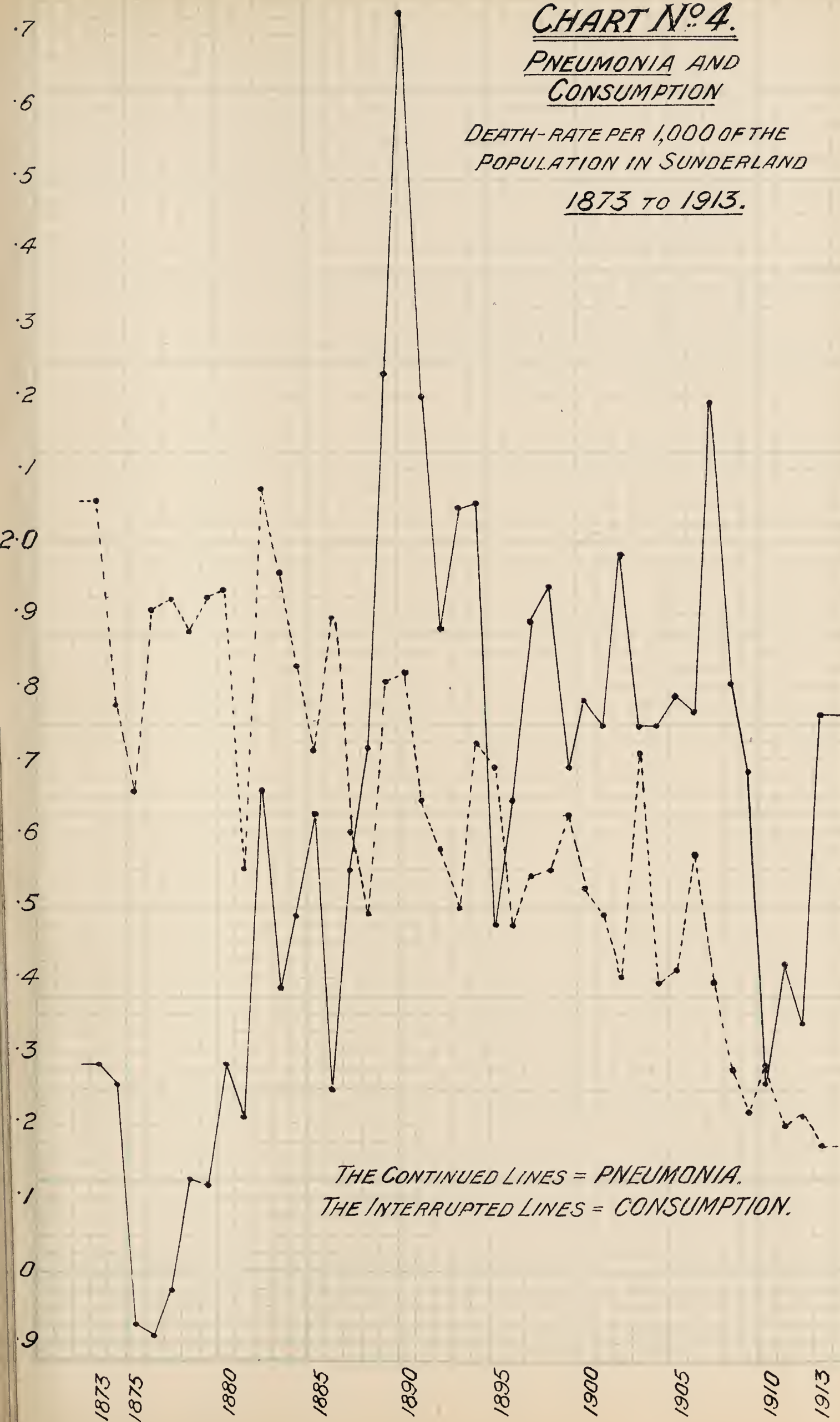


CHART N^o 4.

PNEUMONIA AND CONSUMPTION

DEATH-RATE PER 1,000 OF THE
POPULATION IN SUNDERLAND

1873 TO 1913.



THE CONTINUED LINES = PNEUMONIA.
THE INTERRUPTED LINES = CONSUMPTION.

CHART N^o 5.
DEATH-RATE FROM PNEUMONIA & CONSUMPTION.
ENGLAND & WALES
PER 1,000 OF THE POPULATION FROM
1884 TO 1911.

THE CONTINUED LINES = PNEUMONIA.
THE INTERRUPTED LINES = CONSUMPTION.

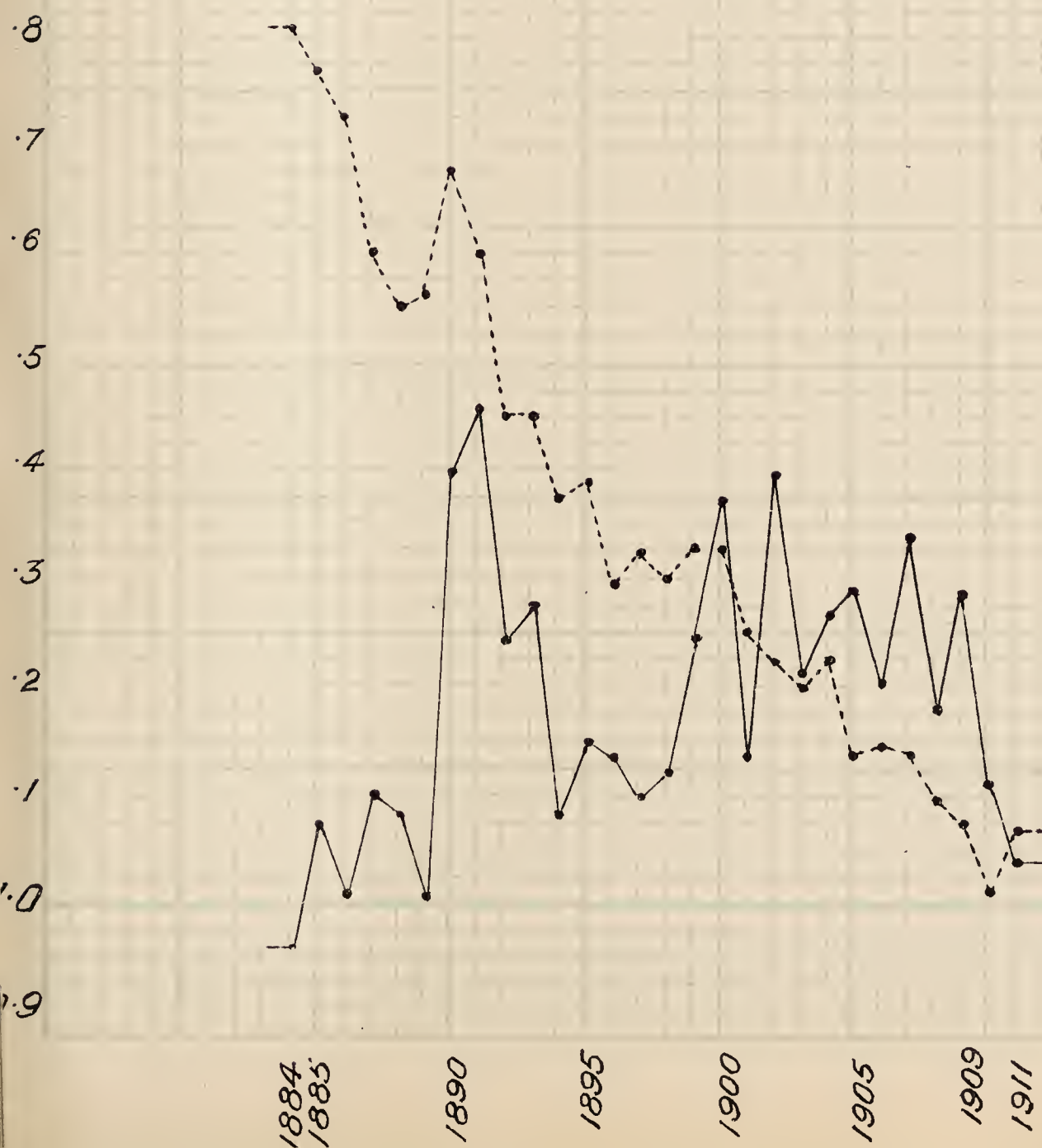




CHART N^o. 6.

DEATH-RATE FROM PNEUMONIA
PER 1,000 OF THE POPULATION
IN SUNDERLAND FROM

1873 to 1913.

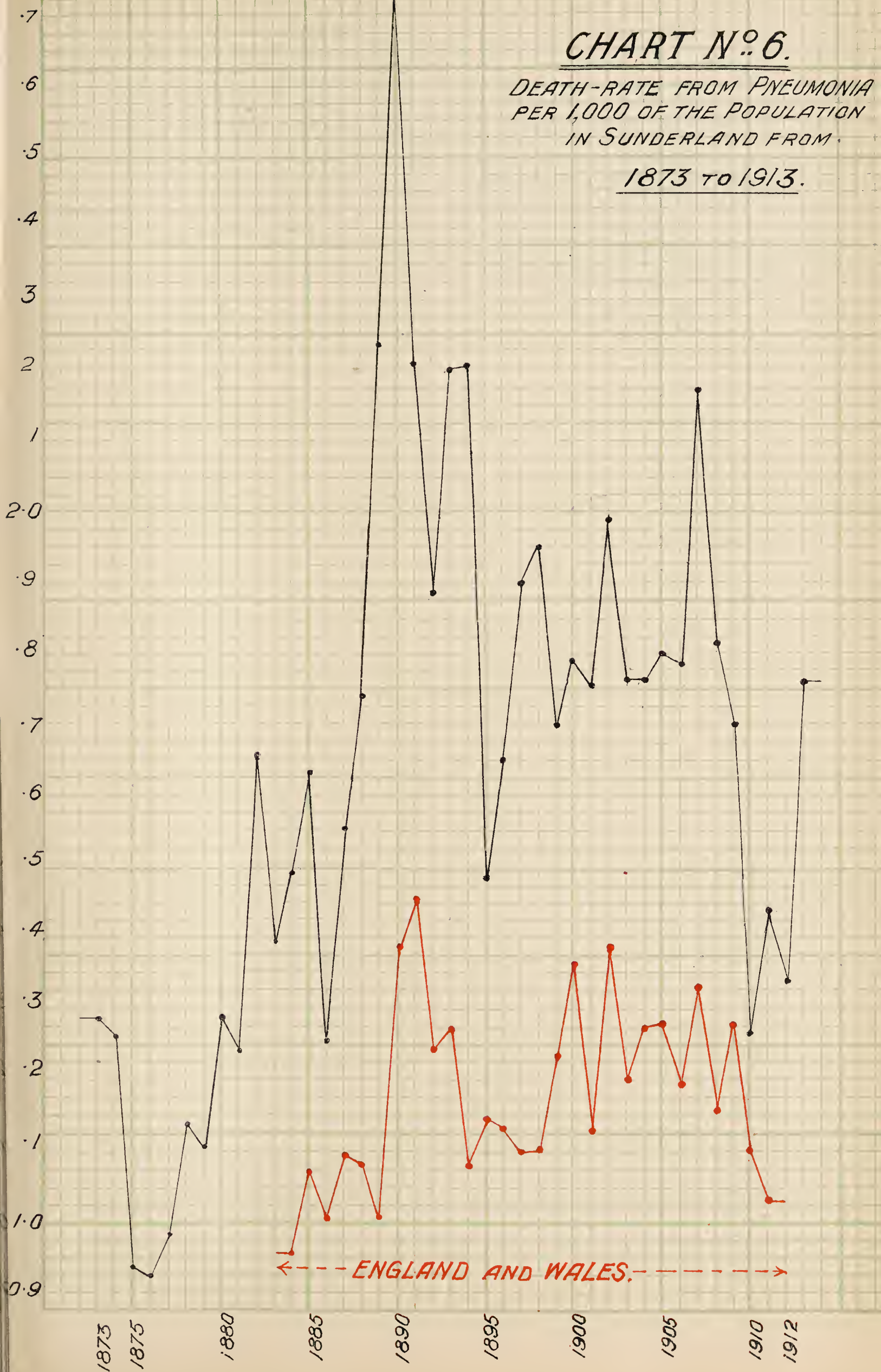


CHART N^o 7

SHOWING THE DEATH-RATE
FROM ALL RESPIRATORY
DISEASES (EXCEPT CONSUMPTION
AND CROUP) PER 1,000 OF THE
POPULATION FOR THE YEARS
1882 TO 1913

per 1000

6.0
5.9
5.8
5.7
5.6
5.5
5.4
5.3
5.2
5.1
5.0
4.9
4.8
4.7
4.6
4.5
4.4
4.3
4.2
4.1
4.0
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3.0

1882

1887

1892

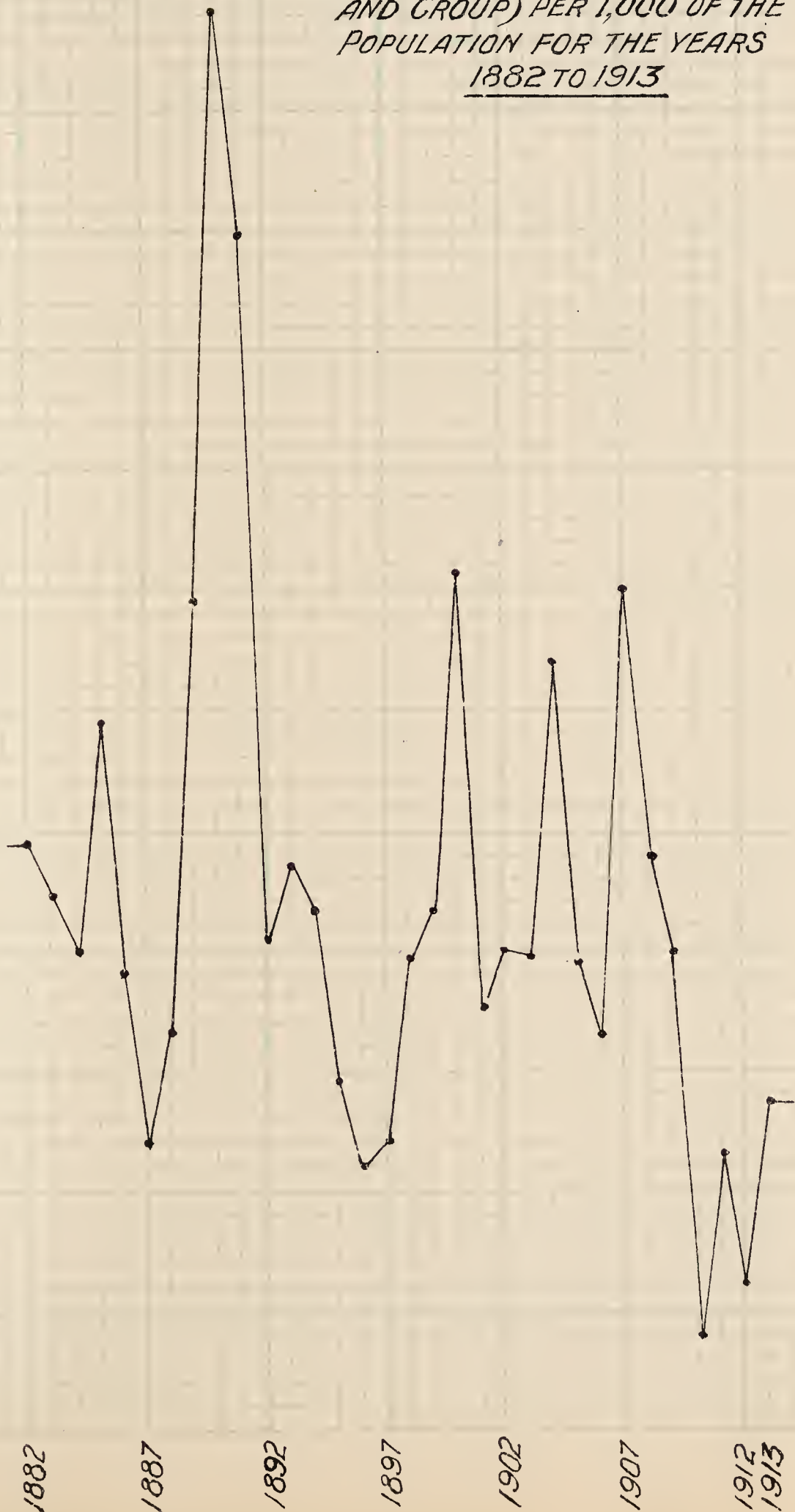
1897

1902

1907

1912

1913





SCARLET FEVER.

The following Table shows the number of cases of Scarlet Fever notified during the last ten years, the attack-rate, the fatality per cent. of cases, and the death-rate per 1,000 of the population.

Year.	No. of Cases Notified.	Attack-rate per 1000 of the population.	Fatality per cent. of cases.	Death-rate per 1000 of the population.
1903	758*	5·1	4·7	0·24
1904	198	1·3	1·5	0·02
1905	184	1·2	0·5	0·01
1906	283	1·9	1·7	0·04
1907	498	3·3	3·8	0·12
1908	325	2·1	1·5	0·03
1909	596	3·9	2·6	0·10
1910	432	2·8	3·2	0·08
1911	431	2·8	1·6	0·04
1912	228	1·5	0·9	0·01
1913	779	5·1	2·4	0·12

* Milk epidemic.

The number of cases of Scarlet Fever notified during the year 1913 was 779, raising the attack rate per 1,000 to 5·1. Reference to the above Table will show that it is ten years since we had an epidemic approaching this figure. Happily the character of the disease was, on the whole, mild, and the fatality per cent. of cases only reached 2·4. There was an increase in the number of cases of Scarlet Fever in 1913 in many parts of the country, including London, many towns in the midlands, as well as neighbouring Boroughs.

DIPHThERIA.

There were 181 notifications of Diphtheria in 1913, an increase of 20 over the previous year, representing an increased incidence of 0·12 per 1,000 of the population. The death-rate per 1,000 was the same as in 1912, viz., 0·14; the fatality-rate per cent. was 12·2 or 0·8 less than in 1912.

The following Table shows the case-mortality per cent., and death-rate per 1,000 of the population, for the last ten years from Diphtheria (including Membranous Croup).

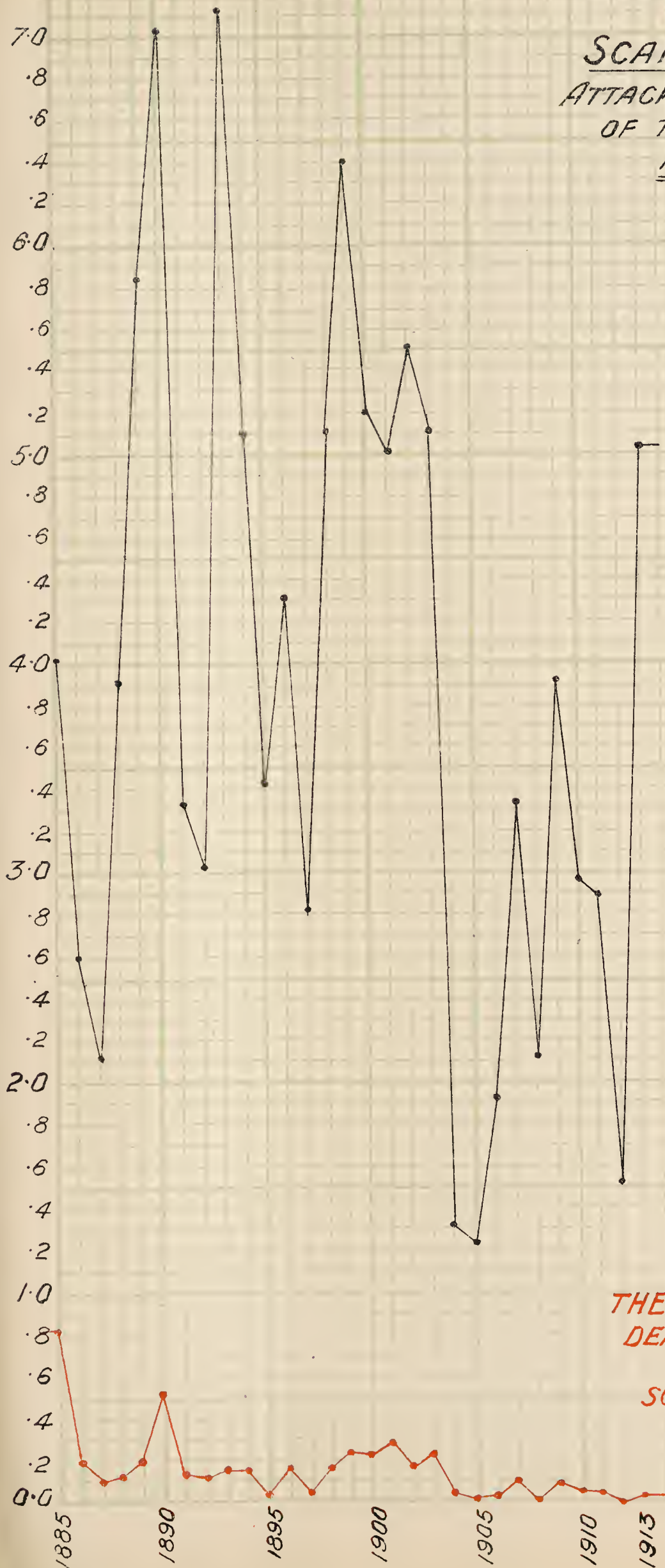
Year.	Case Mortality.	Death-rate per 1,000 of the Population.
1904.....	37·8 per cent.	0·18
1905.....	18·8 ,, 	0·21
1906.....	17·3 ,, 	0·26
1907.....	23·3 ,, 	0·32
1908.....	15·3 ,, 	0·19
1909.....	14·0 ,, 	0·21
1910.....	14·2 ,, 	0·15
1911.....	14·5 ,, 	0·14
1912.....	13·0 ,, 	0·14
1913.....	12·2 ,, 	0·14

WHOOPING COUGH.

There were 19 deaths from Whooping Cough in 1913, the death-rate being 0·12 per 1,000 of the population.

CHART N°8

SCARLET FEVER
ATTACK-RATE PER 1,000
OF THE POPULATION
1885 - 1913.



THE RED LINES SHOW THE
DEATH-RATE PER 1,000 OF
THE POPULATION FROM
SCARLET FEVER FROM
1885-1913.

Per Cent.

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

0

CHART No. 9
SCARLET FEVER
FATALITY PER CENT
OF NOTIFIED CASES
1885-1913.



PerCent
70

65

60

55

50

45

40

35

30

25

20

15

10

5

1885

1890 FIRST PAVILIONS
OPENED 1890

1895

1900 NEW PAVILION OPENED
IN 1901

1905 NEW PAVILION OPENED
IN 1904

1910

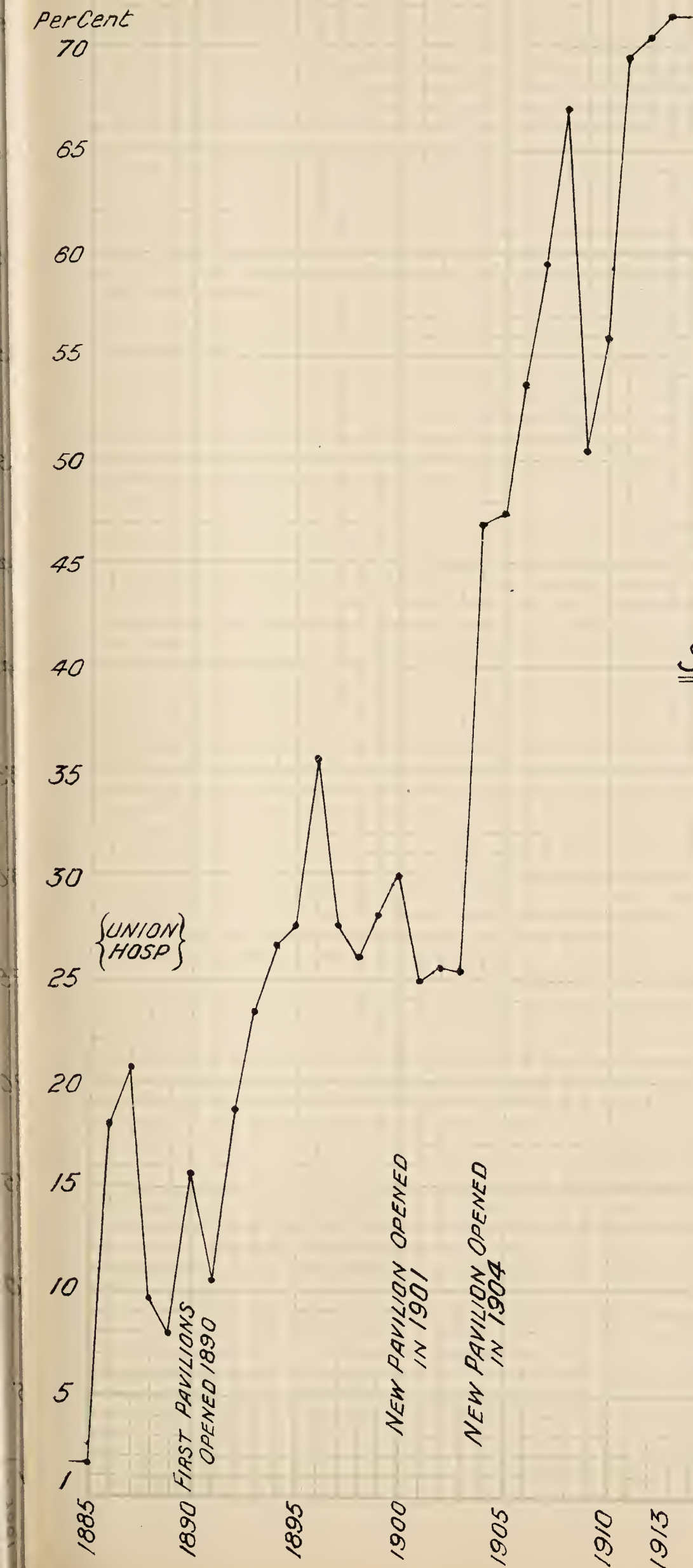
1913

CHART N°10

SCARLET FEVER

PERCENTAGE OF
NOTIFIED CASES
ADMITTED TO
SANATORIUM, OR
HOSPITAL
1885 - 1913.

{UNION
HOSP}



PER 1,000

CHART N°II.

DIPHTHERIA AND MEMBRANOUS GROUP

ATTACK-RATE PER 1,000
OF THE POPULATION
1885-1913.

THE RED LINES SHOW
THE DEATH-RATE FROM
DIPHTHERIA AND
MEMBRANOUS GROUP
PER 1,000 OF THE POPULATION
1885.- 1913.

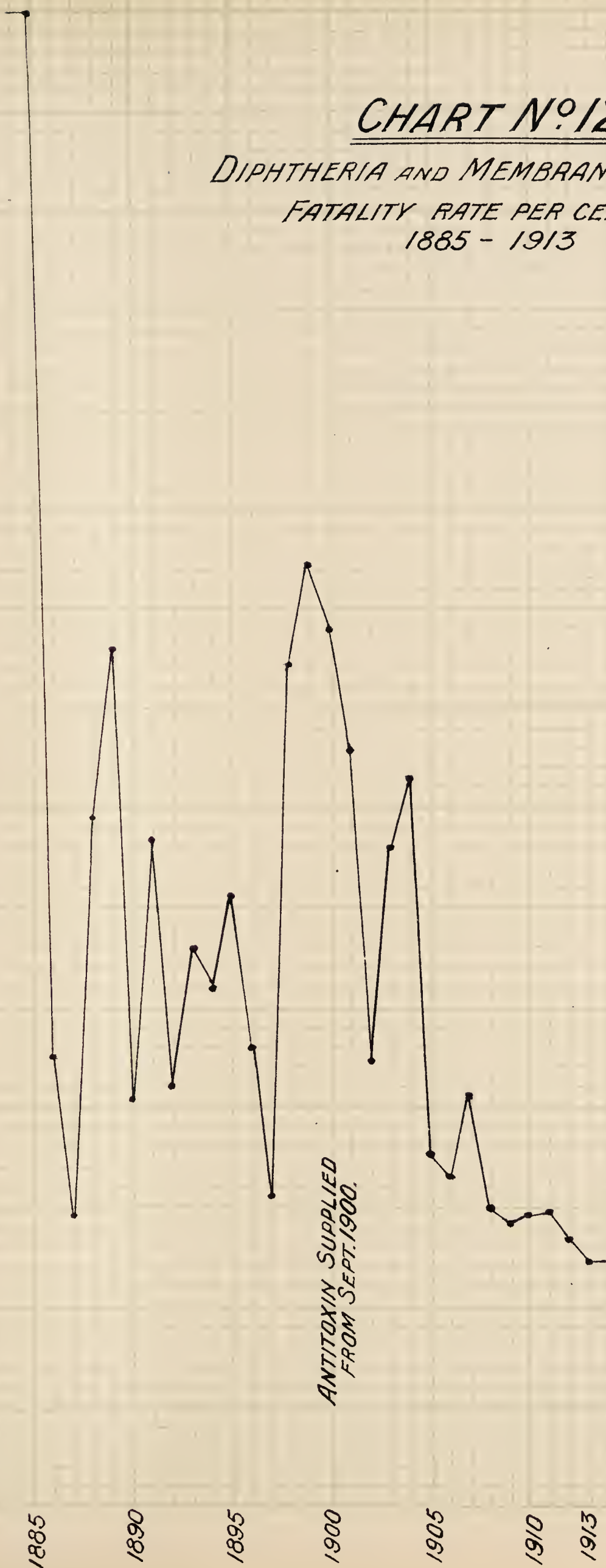
1885 1890 1895 1900 1905 1910 1913



Gent

CHART N°12

DIPHTHERIA AND MEMBRANOUS CROUP.
FATALITY RATE PER CENT OF CASES.
1885 - 1913





er/1000
0.6

0.5

0.4

0.3

0.2

0.1

0.0

0.9

0.8

0.7

0.6

0.5

0.4

0.3

0.2

0.1

0.0

CHART N°13.

*WHOOPIING COUGH
DEATH-RATE PER 1,000 OF
THE POPULATION.*

1873 - 1913.

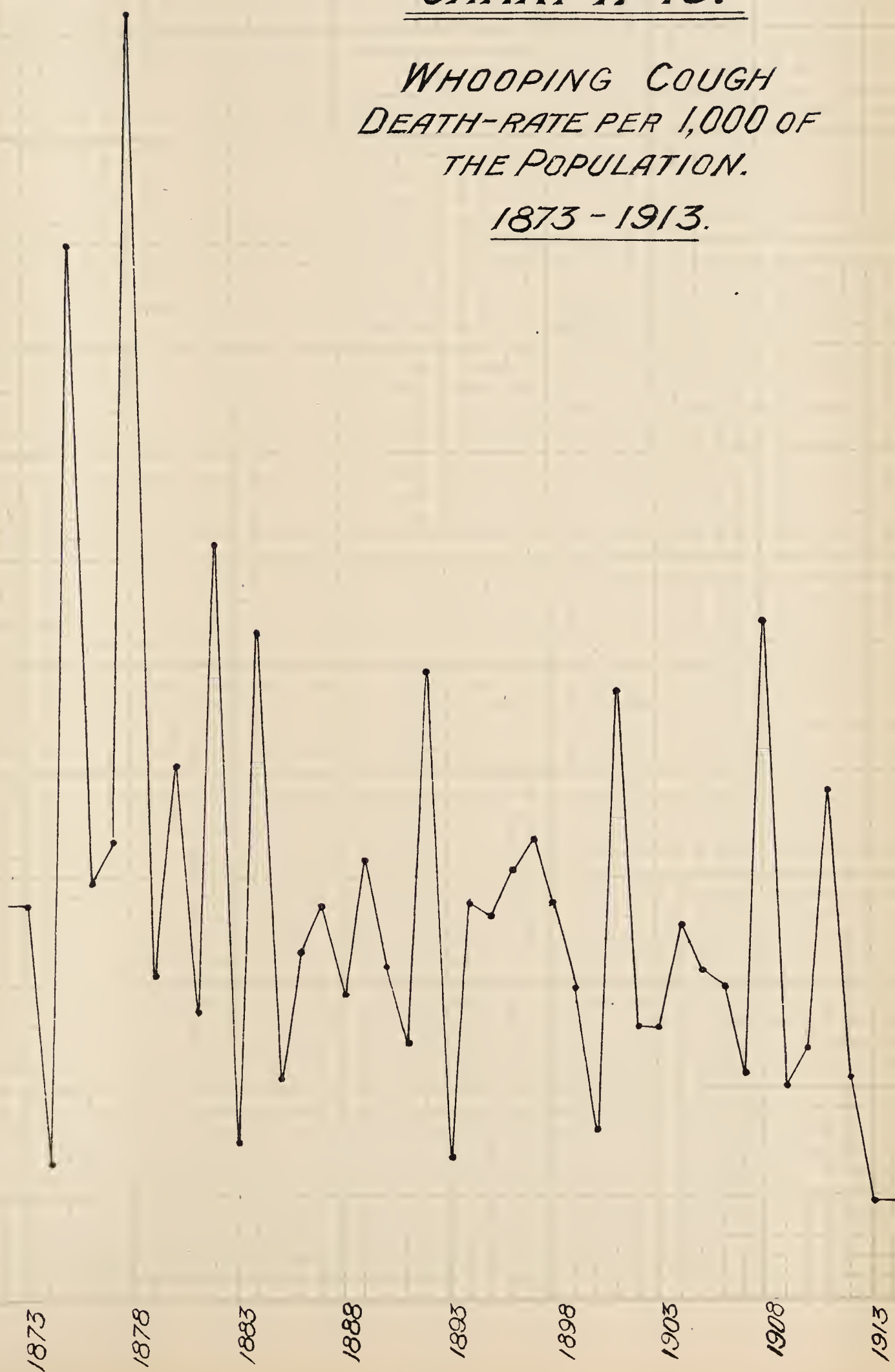


CHART N°14

MEASLES.

DEATH-RATE PER 1,000
OF THE POPULATION
1873-1913.

-1,000

.2
.1
0
.9
.8
.7
.6
.5
.4
.3
.2
.1
0
9
8
7
6
5
4
3
2
1
0
9
8
7
6
5
4
3
2
1
0

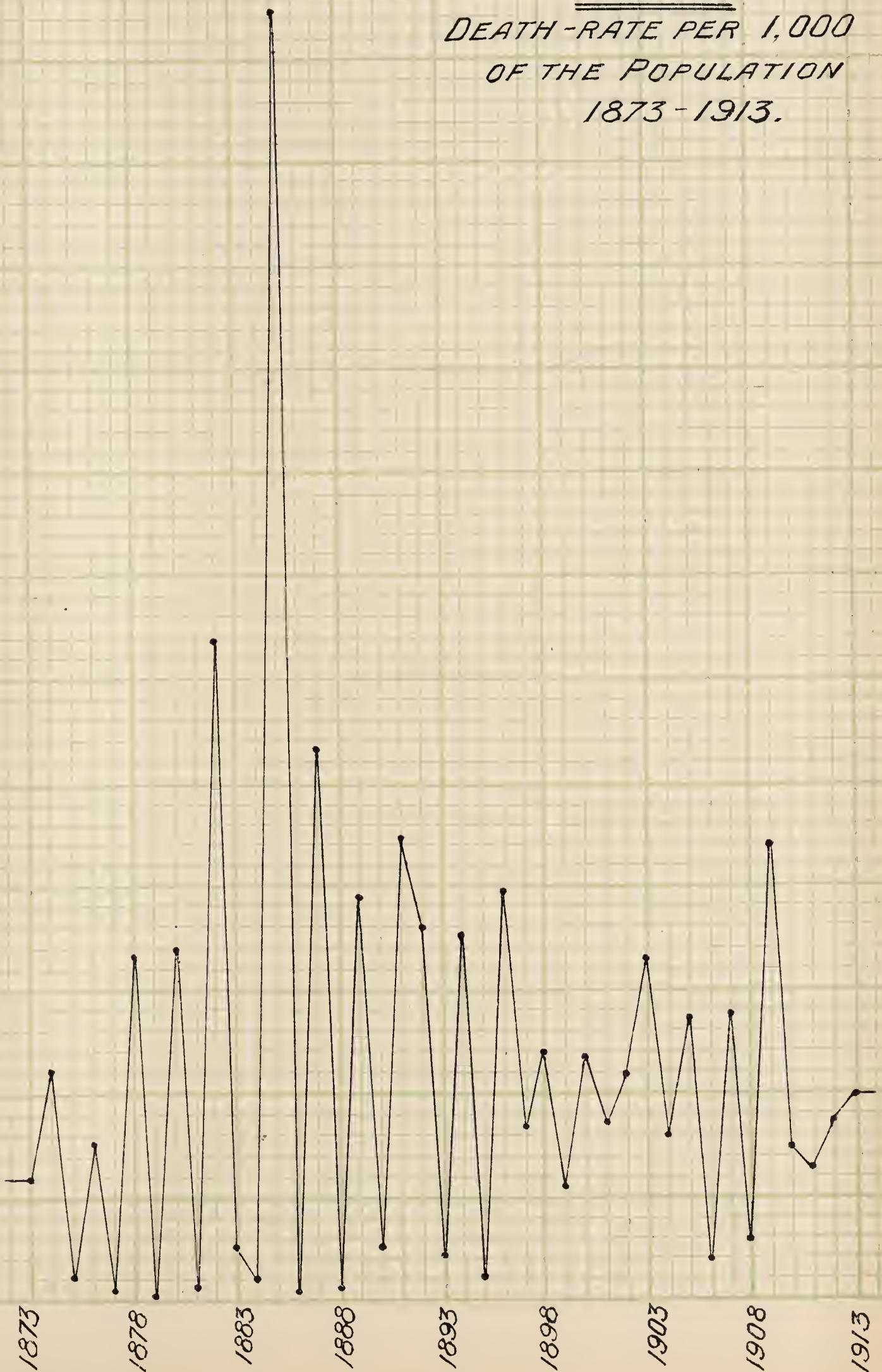




CHART N° 15.

*ENTERIC AND CONTINUED
FEVER.*

*ATTACK-RATE PER 1,000
OF THE POPULATION*

1886 - 1913.

1,000
6.0
5.0
4.0
3.0
2.0
1.0
0.0

*THE RED LINES SHOW
THE DEATH-RATE PER
1,000 ON THE
SAME SCALE.*

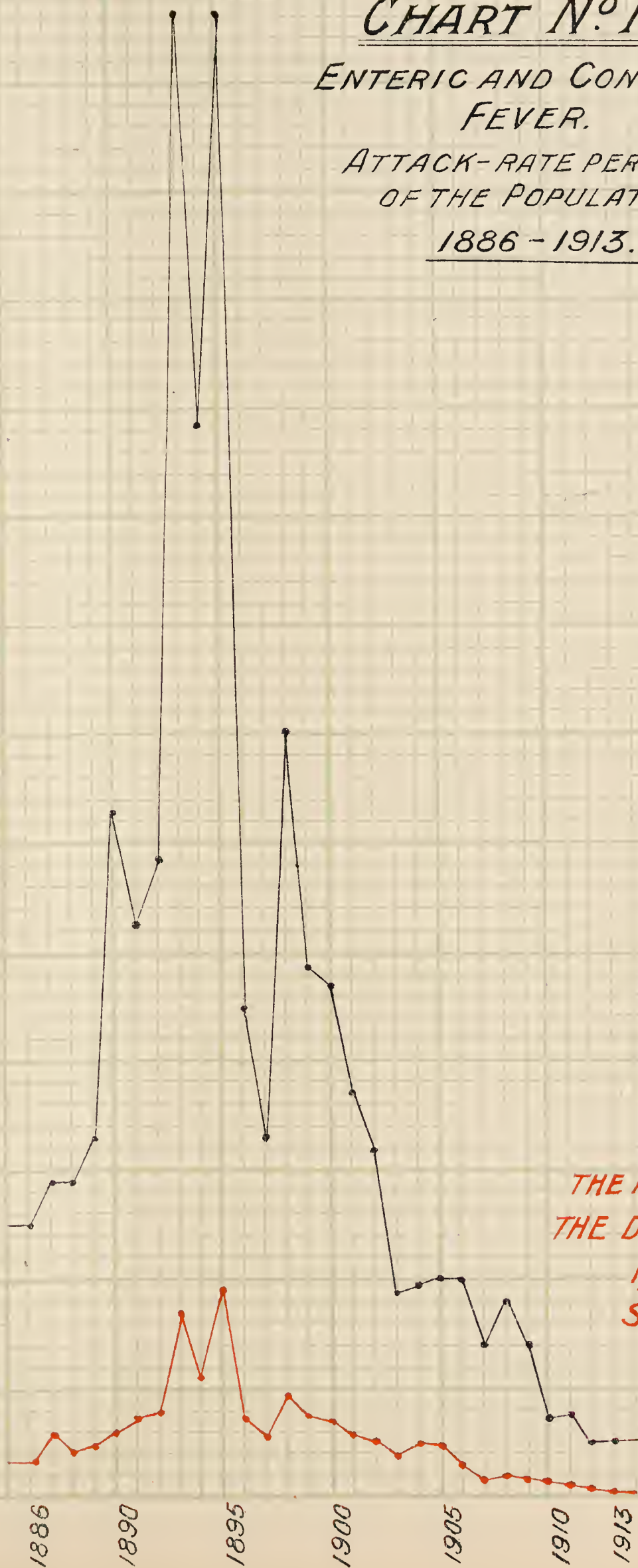




CHART N^o 16.
ENTERIC & CONTINUED FEVER
FATALITY PER CENT
OF CASES NOTIFIED
1886 - 1913.



TYPHOID FEVER.

There were only 40 notifications of Typhoid Fever and 2 of Continued Fever received during the year, the lowest number on record for the Borough. There were 3 deaths, giving a death-rate of 0·019 per 1,000 of the population, and a fatality-rate of 7·1 per cent. These figures are also the lowest yet recorded in the Borough.

MEASLES.

354 cases were notified by School Teachers during 1913, compared with 614 during the previous year. The following schools were closed for 3 weeks:—

Deptford Terrace.	Diamond Hall.	Simpson Street.
St. Josephs.	Redby.	St. Andrew's.
Hendon Valley.		

No more cases were reported from the above schools after closure, with the exception of Simpson Street. At this school 2 cases were notified one month after re-opening.

There were 79 deaths, giving a death-rate of 0·52 per 1,000 of the population.

Chart No. 14 shows the death-rate from measles for the last 41 years.

TABLE G.

Table G. gives the DEATHS from Infectious Diseases during the last 10 years.

Years.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria, including Croup.	Whooping Cough.	Enteric Fever.	Typhus Fever.	Continued Fever.	Diarrhoeal Diseases.
1904	2	59	3	28	64	33	...	...	163
1905	...	102	1	32	58	31	...	...	122
1906	...	15	5	40	56	20	...	...	174
1907	...	104	19	48	42	9	...	...	65
1908	...	23	5	29	120	16	...	...	93
1909	...	166	16	32	38	14	...	...	53
1910	...	60	13	23	43	11	...	...	77
1911	...	49	7	21	91	6	...	...	211
1912	...	68	2	21	42	4	2	...	39
1913	...	79	19	22	19	3	...	...	184

SMALL-POX AND VACCINATION.

There have been 2,993 exemptions granted during the last five years, and a glance at the following table will show that the number of children totally unprotected against Small-pox is steadily increasing every year. I feel that I must continue year by year, in my Annual Report, to sound a note of warning. Many of these unprotected children will most surely suffer when Small-pox becomes epidemic again—as it no doubt will.

Year.	No. of Certificates granted.
1900	49
1901	39
1902	40
1903	42
1904	32
1905	53
1906	66
1907	175
1908	372
1909	510
1910	606
1911	688
1912	817
<hr/>	
Total.....	3,489

BOROUGH SANATORIUM REPORT, 1913.

The total number of patients admitted during the year 1913 was 672, of whom 18 died, giving a death-rate of 2·6 per cent.

Of the 672 cases admitted, 559 were notified as suffering from Scarlet Fever; one of these afterwards turned out to a case of Enteric Fever.

Among the 558 Scarlet Fever patients there were 15 deaths, giving a death-rate of 2·6 per cent. from this disease.

76 cases of Pulmonary Tuberculosis were admitted for educational and special treatment, the majority of which improved and afterwards attended as out-patients.

37 cases notified as Enteric or Continued Fever were admitted. On further observation it was found that 13 of these were not suffering from either of these diseases.

The diagnoses were as follows:—

DISEASES.	Number of Cases.	RESULT.	
		Discharged.	Died.
Broncho Pneumonia ...	1	1	...
Infective Endocarditis..	1	...	1
Tuberculosis.....	2	2 { improved under special treatment.	
Enteritis	1	1	
Simple Pyrexia	1	1	
Tonsillitis.....	1	1	
Gastro Enteritis	1	1	
Meningitis	1	1	
Intestinal Sepsis.....	1	1	
Diphtheria	1	1	
Gastric Catarrh	2	2	
TOTALS	13	12	1

Deducting these cases, there were thus 24 cases of Enteric Fever under treatment, of which 2 died, representing a death-rate of 8 per cent.

Out of 5 cases treated at home, one died.

Over 71 per cent. of the cases notified as Scarlet Fever, and 88 per cent. of those notified as Enteric and Continued Fever were admitted to the Sanatorium from the Borough during the year.

TABLE II.

Cases notified from the Borough, and number admitted to the Sanatorium during the year 1913:—

DISEASE.	1912.			1913.		
	Cases Notified.	Admitted to Hospital.		Cases Notified.	Admitted to Hospital.	
		Number.	Percentage of Total Cases Notified.		Number.	Percentage of Total Cases Notified.
Smallpox .....	...	...	...	...	...	...
Enteric Fever	45	38	84·4	40	36	90·0
Typhus Fever	8	7	87·5	...	...	...
Continued Fever .....	...	...	..	2	1	50·0
Scarlet Fever	228	161	70·6	779	559	71·7
Diphtheria and Mem. } Croup	161	...	...	181	...	...
Pulmonary Tuberculosis	410	107	25·8	3 57	76	21·2
TOTALS	852	313	36·6	1359	672	49·4

Four cases admitted from the Sunderland Rural District and one from the Port, are not included in the above figures.

The following figures show the death-rate in the Sanatorium for the past ten years:—

1904—	Patients	admitted	219,	of	whom	22	died,	or	10·0	per	cent.
1905—	„	„	182,	„	13	„	7·1	„			
1906—	„	„	258,	„	22	„	8·5	„			
1907—	„	„	373,	„	27	„	7·0	„			
1908—	„	„	336,	„	15	„	4·5	„			
1909—	„	„	379,	„	23	„	6·1	„			
1910—	„	„	299,	„	22	„	7·3	„			
1911—	„	„	348,	„	12	„	3·4	„			
1912—	„	„	315,	„	4	„	1·3	„			
1913—	„	„	672,	„	18	„	2·6	„			

TABLE I.

Shewing the number of cases of Infectious Diseases admitted to the Sanatorium for the last 10 years.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Smallpox	34	2	...	1	1	...	...	...	...	...
Measles .....	...	...	...	1	...	1	...	1*	...	...
Scarlet Fever.....	94	87	152	297	217	302	242	299	161	559
Diphtheria .....	...	...	...	...	...	2	...	...	...	...
Typhus Fever .....	..	...	...	...	...	...	...	...	7	...
Enteric and Continued Fever	92	95	106	73	117	74	57	48	38	37
Suspected Epidemic Cerebro-Spinal Meningitis ...	...	...	...	1	...	..	..	...	..	...
Erysipelas .....	...	...	...	...	1	...	...	...	...	...
Consumption .....	...	...	...	...	...	...	...	..	107	76
Totals	219	184	258	373	336	379	299	348	313	672

* Notified as "Scarlet Fever."

BACTERIOLOGICAL REPORT.

The following is a Report of the Bacteriological examinations made by Professor Hutchens during the year 1912 :—

DRINKING WATER.

CLASS.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Percentages.	
					1912.	1913.
I. Containing no Bacillus Coli in 100 c.c.	%	%	%	%		
	34.1	63.3	14.5	25.0	42.0	34.2
II. B. Coli present in 100 c.c.	54.5	34.6	72.7	54.5	42.6	54.1
III. B. Coli present in 10 c.c.	11.4	2.1	12.8	20.5	14.9	11.7
IV. B. Coli present in 1 c.c. ....	...	..	...	...	0.5	...

THE DURHAM COUNTY, SUNDERLAND AND SOUTH SHIELDS JOINT WATER COMMITTEE.

ANNUAL REPORT OF THE BACTERIOLOGIST.

The examination of the Sunderland and South Shields water supply on behalf of the Joint Committee was begun on the 10th June, 1912, and the present report is a review of the work carried out between that date and the 30th June, 1913.

Samples have been taken more or less regularly every fortnight, and in all 243 have been examined, including 150 from the wells, 88 from the reservoirs, and 5 from a tap in the Company's Offices in Sunderland.

The results are shown in tabular form on page 4.

As regards the total number of organisms present while the figures are not suitable for close analysis, the general result is such as to show quite clearly that the well waters contain far fewer organisms than the water in the reservoirs.

Most importance attaches, as explained in my first quarterly report, to the presence or absence of colon bacilli. Taking first the

well waters. A reference to the table will show that "typical" colon bacilli have been isolated at one time or another from all the wells with the exception of Cleadon and Seaham (from each of which only one sample has been examined). Summarizing the figures it will appear that I have isolated colon bacilli from 18 per cent. of the well water samples—generally from not less than 100 cc. of water, but in some cases from 10 cc. (North Dalton, Ryhope, Shotton and Stonygate), and in one case from 1 cc. (Seaton). This is certainly an important fact and one which deserves the attention of the Committee. Mr. Wood, the Company's Bacteriologist, has gone into the question of the effect of rainfall, and has kindly supplied me with an elaborate series of figures. I agree with his conclusion that if rainfall has an effect that effect is very difficult to trace. It must, therefore, be assumed that under normal conditions the degree of filtration is insufficient to remove all the contamination which the rain gathers as it falls on the surface of the ground. It is clear that the amount at present passing the natural filter is not such as in any way to have a detrimental effect upon the public health. But it will not be denied that if the filtration process became materially less efficient a certain risk would occur. It would seem necessary therefore to determine whether as the result of continued pumping the water deteriorates in quality.

Attention has been drawn in the quarterly reports to the fact that the Water Company's results are not in agreement with those I have obtained. The Company have only found colon bacilli on three occasions (2 per cent.) in the well samples. This, however, does not seem to alter the position: it merely means that I have been able to detect the organisms when they have failed in parallel samples. And I believe it was stated by the Company a year ago that they had never found colon bacilli in the well waters. If I am correct in my recollection their present results clearly show that some deterioration of the water is now taking place.

Secondly, as regards the reservoir waters. "Typical" colon bacilli have been isolated from 50 per cent. of the samples. Here again they were not detected in most cases in less than 100 cc. but in some cases (Cleadon, Humbledon Low, Seaham North and Seaton) they were found on occasions in 10 cc. The larger number in the reservoirs as compared with the wells is to be attributed partly to dust partly to birds. The Committee has already decided to take what steps lie in their power to prevent contamination by dust, and it certainly is most desirable that refuse should not be deposited in the neighbourhood of the reservoirs. With a view to the bacterial purification of the water in the reservoir would it be possible for the Committee to suggest to the Company the use of some one or other of the chemical substances which have been advocated for water purification on a large scale?

Table shewing results of the examination of samples of water from June 10th, 1912, to June 30th, 1913 :—

WELLS.	No. of samples examined.	No. of samples from which “ typical ” colon bacilli have been isolated.	Smallest volume of water from which “ typical ” colon bacilli were isolated.*	Average number of organisms per cc. in four days at 21° c.
Burdon	14	3	—	25·5
Cleadon	1	0	—	—
Dalton	14	2	—	32·5
Fulwell	13	1	—	11
Humbledon	15	3	—	22
North Dalton	15	2	10 cc. (once)	44·5
Ryhope	17	3	10 cc. (once)	11·5
Seaham	1	0	—	4
Seaton	14	3	1 cc. (once)	83
Shotton	15	4	10 cc. (twice)	94·5
Stonygate	17	5	10 cc. (once)	16
Thorpe	14	2	—	18
RESERVOIRS.				
Cleadon	6	2	10 cc. (twice)	729
Dalton	9	7	—	1140
Downhill	6	3	—	681
Fulwell	6	2	—	115
Humbledon High	9	4	—	194
Humbledon Low	9	3	10 cc. (once)	676
Murton	6	2	—	312
Ryhope	10	7	—	704
Seaham North	4	2	10 cc. (once)	850
Seaham South	4	1	—	—
Seaton	9	5	—	444
Stonygate	10	6	—	918
Tap Waters	5	3	—	51

*This was 100 cc. where not otherwise stated.

EXAMINATION OF MILK FOR TUBERCLE BACILLI.

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Positive (T. Bacilli present)	9	3		3	17
Negative (T. Bacilli not found...	13	19	21	21	74
Totals	22	22	23	24	91

Thus Tubercle Bacilli (germs of Consumption) were found in 22·9 per cent. of the total number of samples examined during the year. In the previous year 5·5 per cent. of the total number of samples were Tuberculous.

ACTION TAKEN UNDER SECTION 33 OF THE SUNDERLAND
CORPORATION ACT, 1907, PART V., MILK SUPPLY
(TUBERCULOSIS).

Seventeen samples of milk taken by the Inspectors in the Borough were found to contain tubercle bacilli on examination by the Bacteriologist to the Corporation.

1. This sample was from a farm outside the Borough. Three cows exhibited signs which, in the opinion of Mr. R. S. Dudgeon, M.R.C.V.S., appeared to indicate the presence of Tuberculosis. The owner had the three cows tested with tuberculin, and two were found to react to that test. The farmer promised not to send any milk from the two cows which reacted, and to dispose of them at an early date.

2. From a farm outside the Borough. In this case there was only one cow in which there were suspicious signs indicative of tuberculosis. The owner promised not to send any milk from this cow into the Borough, and gave an undertaking to get rid of the animal within 14 days.

3. The milk was sent in by rail to a large Dairy Company in Sunderland, the sample having been taken at the Central Railway Station. The Medical Officer of the County in which the farm was situated was communicated with, and he promised to make all possible enquiry into the matter, but said that he was afraid in the case of such a large distributing Company it would be rather late to trace the origin of the tuberculous milk.

4. This sample was from a Dairy situated in the Borough; the milk from which the sample was taken had been mixed with milk from another Dairy situated outside the Borough. The cows were examined in both the dairies with the result that 4 in the town dairy and 1 in the dairy outside the Borough were found to exhibit signs which were suspicious of the animals being affected with tuberculosis. The owner of the 4 suspicious cows in the town dairy attended the meeting of the Health Committee and stated that all four cows had been sent out of the district. The farmer from outside the Borough also attended the meeting, and gave an undertaking not to supply within the Borough any milk from this cow.

5. From a farm outside the Borough. Four cows were found in this case exhibiting signs of Tuberculosis. An order was made upon the farmer requiring him not to supply within the Borough any milk from these six cows. The cows were ultimately removed from the farm—destination unknown.

6. This sample was taken at the Central Railway Station and was from a farm at a considerable distance from Sunderland. On writing to the Medical Officer of the County in which the farm was situated, it was ascertained that the supply of milk from this farm to Sunderland had been stopped.

7. From a farm within the Borough. There were two suspicious cows. An order was made upon the farmer requiring him not to supply milk within the Borough from these cows.

8. From a dairy within the Borough; the dairyman kept no cows, but was supplied by a farmer outside the Borough. The Veterinary Surgeon examined the cows at the latter place and found one with an indurated udder, but was informed that this cow was not in the milking on the day when the sample was taken. The carcass of a cow from this farm, however, had recently been slaughtered and found to be badly affected with tuberculosis. It is possible, therefore, that this cow's milk may have been the cause of the sample being tuberculous.

9. Farm outside the Borough. Three cows appeared to be affected. The usual Order was made not to supply milk within the Borough.

10. Farm outside the Borough. The Veterinary Surgeon examined the udders of 22 cows, but found no definite symptoms of tuberculosis. The Committee passed a resolution that no action be taken.

11. Farm outside the Borough. There were two suspicious cows, and the owner agreed to have them tested. This was done and one re-acted. An order was made with respect to the re-acting cow.

12. From a dairy within the Borough, the milk of which was supplied from a farm outside the Borough. The County Medical Officer was informed, and he promised to take whatever steps he could to prevent the milk from any suspected animals being sent into Sunderland. The Medical Officer further reported two of the cows exhibited suspicious signs, and that the sale of milk from these cows had been stopped.

13. Farm outside the Borough. One suspicious cow was found on examination. The usual order was made in respect to this cow.

14. Farm outside the Borough. Two suspicious cows were found. The owner appeared before the Health Committee, and an order was made in respect to one of the cows.

15. Sample taken from the Railway Station from milk supplied by a farmer in Dumfries. The County Medical Officer of Dumfries was communicated with, and caused 32 cows at this farm to be tested with tuberculin, 15 of which re-acted. Samples of milk were taken from 9 of the 15 cows (the other 6 being dry) and one was found to give tuberculous milk. The animal was slaughtered and primary tuberculosis of the udder was found. The County Medical Officer intimated that the farmer would be warned not to send any milk from the 6 cows when they again came into the milking until samples had been taken and examined.

16. From a dairy in the Borough, the milk being supplied from a farm outside the Borough. The Veterinary Surgeon went to this farm and examined the udders of 20 cows, 18 of which were in the milking when the sample was taken. One exhibited signs suspicious of tuberculosis. The Committee made no order, but instructed the Town Clerk to inform the Durham County Council of the facts.

17. From a dairy outside the Borough. This dairyman kept no cows, but was supplied by a farmer outside the Borough. One cow was found which had a very bad induration of the right hind quarter of the udder. It was alleged, however, that the milk from this cow was not included in the sample. In view of the fact that no other suspicious cows were found an order could not be made. The County authorities were notified and acquainted with the facts of the case. The above cow was slaughtered and found to have a tuberculosis udder.

EXAMINATION OF SWABS FOR DIPHTHERIA.

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Diphtheria Bacilli found	50	52	41	56	199
Diphtheria Bacilli not found ...	67	125	232	342	766
Totals	117	177	273	398	965

4·8 per cent. of the Scarlet Fever cases admitted to the Borough Sanatorium were "Positive," i.e., were Diphtheria "Carriers."

EXAMINATION OF BLOOD FROM PATIENTS SUSPECTED TO BE SUFFERING FROM ENTERIC FEVER (GRUBER-WIDAL REACTION).

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Positive	14	1	4	10	29
Negative	12	16	12	8	48
Totals	26	17	16	18	77

EXAMINATION OF SPUTUM IN SUSPECTED CONSUMPTION.

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Tubercle Bacilli present	19	32	17	18	86
Tubercle Bacilli not found	86	50	44	65	245
Totals	105	82	61	83	331

THE RAINFALL IN 1913.

On page 78 will be found the Summary of Meteorological Observations, a record of which is kept at the Health Office. The readings of atmospheric pressure are taken at the office; the other data are obtained from the various instruments in Mowbray Park.

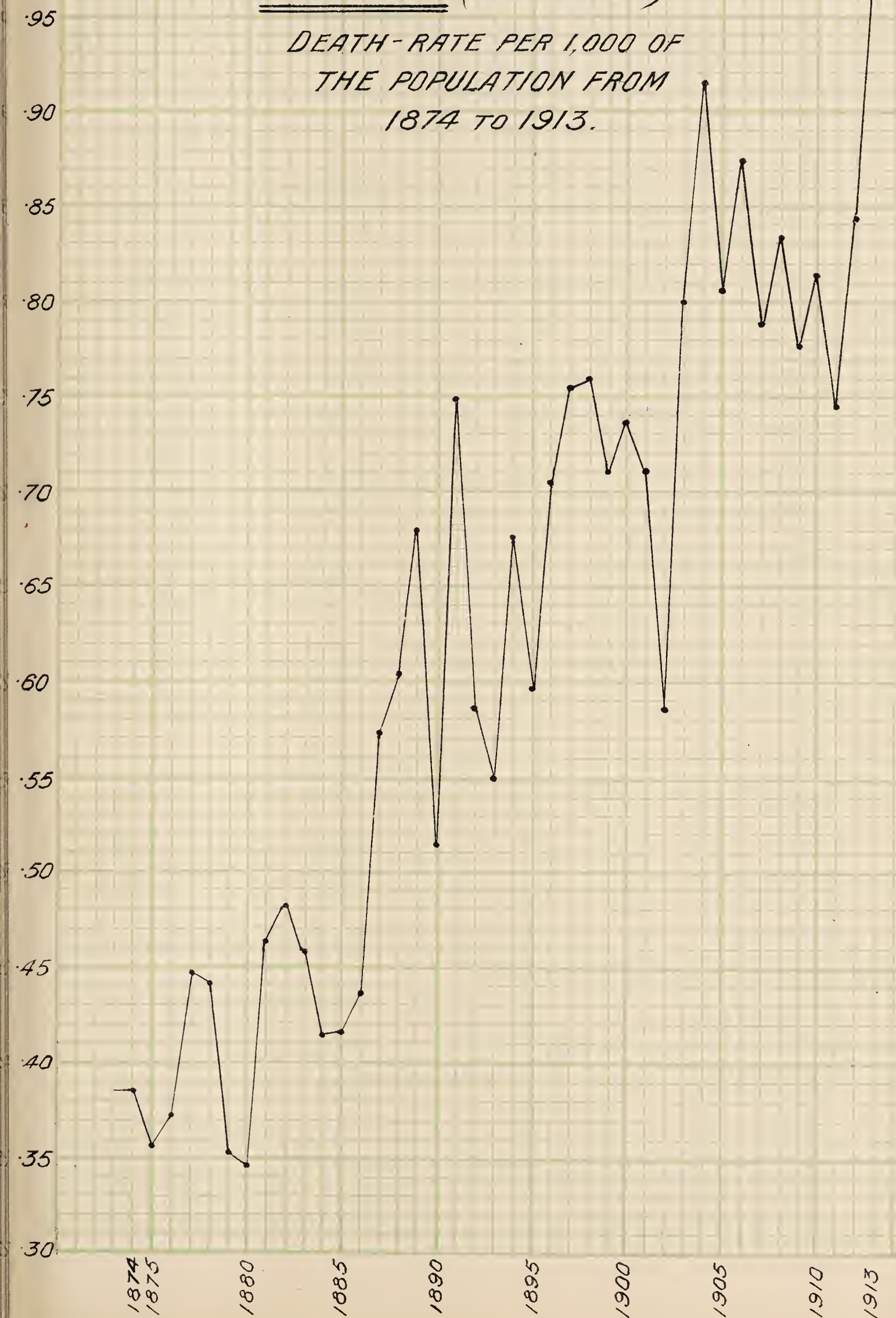
The total amount of rain which fell during the year amounted to 21.53 inches, being 4.05 inches below the average.

NUMBER
PER 1,000
1.00

CHART N° 17.

CANCER (ALL FORMS)

DEATH-RATE PER 1,000 OF
THE POPULATION FROM
1874 TO 1913.



INFANTILE MORTALITY.

The following Table indicates the Infantile Mortality figure in Sunderland contrasted with that of England and Wales from 1885 :—

	Infantile Mortality in Sunderland.	Infantile Mortality in England and Wales.
1885	156	138
1886	152	149
1887	152	145
1888	135	136
1889	182	144
1890	175	151
1891	178	149
1892	159	148
1893	189	159
1894	168	137
1895	191	161
1896	161	148
1897	168	156
1898	202	160
1899	175	163
1900	169	154
1901	179	151
1902	153	133
1903	159	132
1904	165	145
1905	143	126
1906	140	132
1907	130	115
1908	144	121
1909	136	109
1910	128	106
1911	151	130
1912	115	95
1913	135	109
1889 } Average	177	150
1893 }		
1894 }	178	152
1898 }		
1899 }	167	147
1903 }		
1904 }	144	128
1908 }		
1909 }	133	110
1913 }		

PRINCIPAL CAUSES OF INFANTILE DEATHS:—
WHOLE BOROUGH.

CAUSE OF DEATH.	Number of Deaths.	Death-rate per 1,000 Births.
Measles.....	12	2·5
Diarrhoeal Diseases	115	24·0
Congenital Defects.....	12	2·5
Atrophy, Debility, and Marasmus and Debility at Birth.....	119	24·8
All Tuberculous Diseases.....	13	2·7
Premature Birth.....	116	24·2
Simple Meningitis	14	2·9
Convulsions	21	4·3
Bronchitis	76	15·8
Pneumonia	65	13·5
Suffocation (over-laying)	6	1·2
Syphilis.....	11	2·3
Whooping Cough	11	2·3
Gastritis	14	2·9

SUNDERLAND CORPORATION ACT, 1907.
NOTIFICATION OF BIRTHS.

The Births which took place during the year amounted to 4,792; of these, 4,518 were notified to me under the provisions of the above Act, the number so notified being at the rate of 94·3 per cent.

In the East District 1,826 births occurred, of which 1,737 were notified = 95·1 per cent.

In the West District 1,880 births occurred, of which 1,794 were notified = 95·4 per cent.

In the North District 1,086 births occurred, of which 987 were notified = 90·9 per cent.

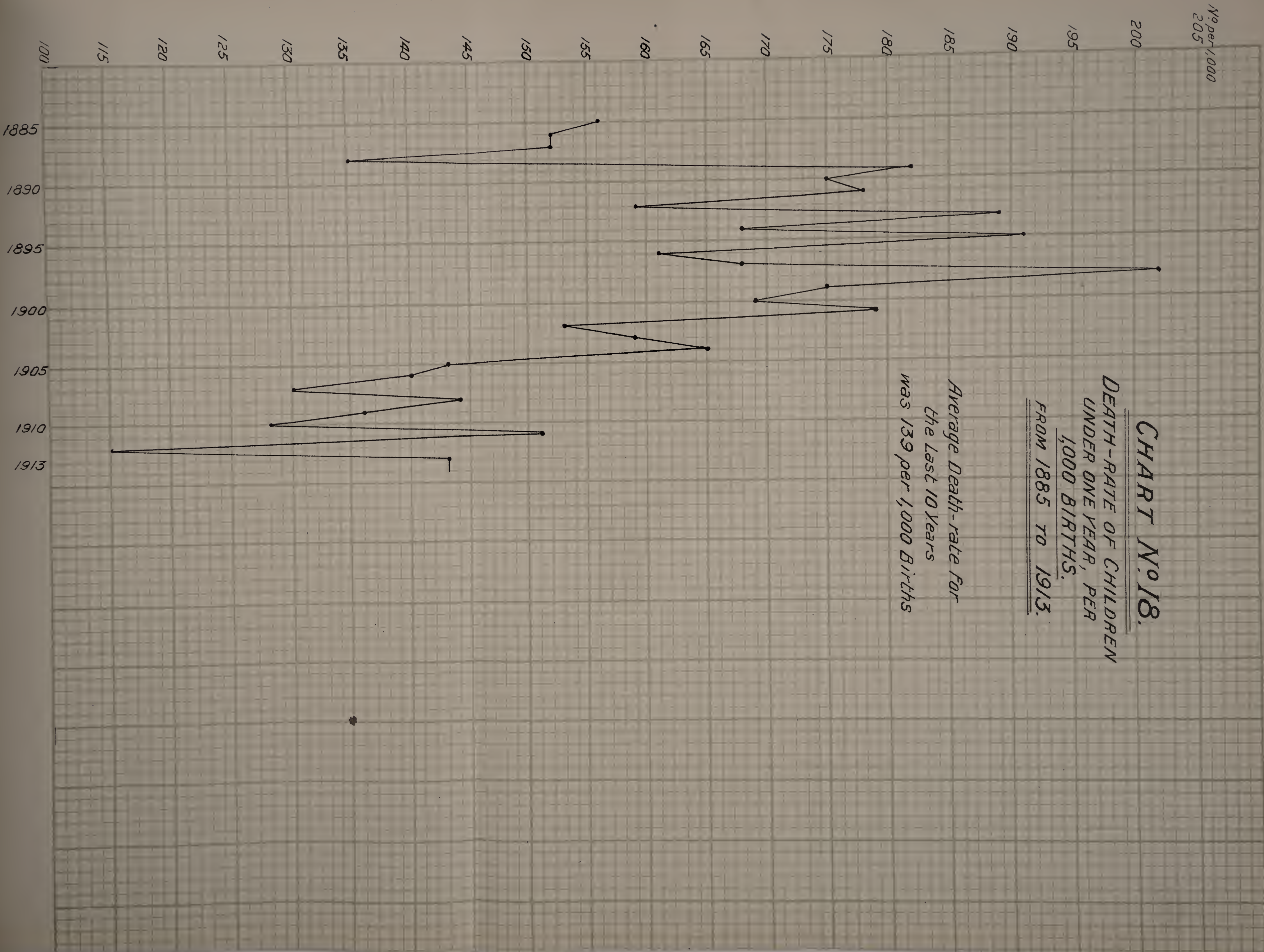
No per 1,000
205

CHART No 18.

DEATH-RATE OF CHILDREN
UNDER ONE YEAR, PER
1,000 BIRTHS.

FROM 1885 TO 1913.

Average Death-rate for
the Last 10 Years
was 139 per 1,000 Births



HEALTH VISITORS' REPORT.

The following is a summary of the work done by the Health Visitors during the year, compared with the previous year:—

	Year 1913.	Year 1912.
Visits to Premises where children suffered from Infectious Diseases.....	928	675
Cases of Puerperal Fever visited	2	10
Number of Visits to Consumptive Cases...	484	396
Number of Re-visits to Consumptive Cases	1682	1262
Visits to Infants immediately after Birth ...	4137	4260
Number of Re-visits to Infants	7512	7811
Visits to houses where Infants had died under the age of one year	337	413
Visits to Boarded-out children, undertaken at the request of the Board of Guardians	219	265
Visits to Midwives	146	234
Total	15447	15326

REPORT OF THE HEALTH VISITORS.

TO THE MEDICAL OFFICER OF HEALTH.

SIR,

I beg to submit the following report of work done by the Health Visitors during the year 1913.

BIRTHS.

During the year 4,518 births were notified in the Borough. Of these 4,137 were visited by the Health Visitors and advice given, also printed instructions left as to the care and nutrition of the child.

Breast feeding is always advised as paramount and feeding at regular intervals as of great importance. Should the mother's supply of milk appear inadequate she is recommended a suitable diet for herself before resorting to hand-feeding. Should hand-feeding be necessary, cow's milk—boiled—is always advised. Advice is also given as to the care of the milk, the kind of bottle to be used, importance of the daily bath, a separate cot for the child, fresh air and clothing.

RE-VISITS.

7,512 re-visits were made to children under one year, this being the period a supervision is kept over the child to watch its progress and reiterate the advice already given. In cases of overcrowding, uncleanness or wilful neglect of the child—when the influence of the Health Visitor failed—these cases were reported to the Inspectors for this work and dealt with accordingly.

BABIES' WELCOMES.

There are three Babies' Welcomes in the Borough, which are doing excellent work in the interest of child life:—

The Pioneer, Pottery Buildings.—From January, 1912, to December, 1913 (two years), there were 170 babies weighed. Of these only three have died. One had a congenital defect, and two were premature twins. These lived for six and nine months respectively and were hand-fed owing to the debility of the mother.

I attend this Babies' Welcome on the third Monday afternoon in each month, weigh the babies, give advice to any who request it, and afterwards speak at the Women's Meeting. Often there is an attendance of over 200 women. I cannot speak too highly of the good work being done among the women and children of the East end of the town by Miss Mounsey and her staff of willing helpers.

Durham Road Babies' Welcome I visit on the second Monday afternoon in each month, and render the same service there. The number here is not so large, the attendance at the Meeting being from 70 to 100.

Guild of Help Babies' Welcome.—Miss Lee and myself have occasionally attended this Babies' Welcome and assisted in its work. Arrangements have now been made whereby one of the Health Visitors will be present at each weekly meeting and render any service that lies within her province.

Addresses have been given during the year at the following places:—

Pottery Buildings Women's Meeting.		
Durham Road	”	”
Whitburn Street	”	”
Southwick Cong.	”	”
Cleveland Road	”	”
Dock Street	”	”
Ewesley Road	”	”
Crescent Row	”	”
Sans Street	”	”
Prospect Row	”	”
Guild of Help	”	”

The subject taken being as follows:—

Preservation of Infant Life.

Hygiene of Pregnancy.
 Care of the Newly-Born.
 Infant Feeding.
 Infantile Diarrhœa.
 Prevention of Bronchitis.
 Suitable Clothing for Infants.
 Rickets, Cause, Symptoms and Prevention.
 Infectious Diseases.
 Cause and Danger of Mouth Breathing.

Prevention of Consumption.

Hygiene and Temperance.

Care of Milk and Other Foods.

Cancer, its Early Recognition.

SUPERVISION OF MIDWIVES.

There were 32 midwives who notified their intention to practice in the Borough during 1913. The qualification of these midwives is as follows:—

Central Midwives Board	7
Glasgow Maternity Hospital	1
Bona-fide*	24
East District	18
West „	11
North „	3

Of the 4,137 births visited by the Health Visitors 2,613 were attended by midwives:—

East District	1,299
West „	803
North „	511

A strict supervision has been kept over the work of the midwife, and any neglect of duties has been dealt with.

During the year there have been received from the midwives 148 notifications of calling in medical aid, the causes being the following:—

Prolonged Labour	49	Lacerated Perinæum	4
Still Birth	26	Placenta Prævia	3
Premature Birth	14	Hæmorrhage	3
Weakness of Mother	11	Transverse Presentation	3
Weakness of Child	11	Eclampsia	2
Adherent Placenta	8	Cord Presentation	1
Ophthalmia Neonatorum ...	7	Hand Presentation	1
Breech Presentation	4	Deformity of Child	1

* Only a very few of the bona fide midwives are able to keep a satisfactory record of the pulse and temperature. This often necessitates frequent re-visits by the Health Visitors during the puerperium.

There were 146 visits paid to midwives during the year for the reasons given:—Inspection, enquiries in connection with puerperal fever, still-births, ophthalmia neonatorum, illness of mother of child.

INSPECTION.

The homes of all the midwives were found to be clean and tidy.

All the midwives wear washing dresses, and on the whole are considered satisfactory in this respect.

Bags and appliances in three cases were found unsatisfactory. These, however, were greatly improved before the notification of intention to practice for 1914 was accepted.

In two cases the registers were found not entered up to date. One was that of an aged midwife, over 70 years of age, who can neither read nor write. The other was wilful neglect; for this and other evidences of slackness in her work she was called before the Local Supervising Authority, and censured.

Since the coming of the maternity benefit, there has been very little trouble on account of "Handy Women" attending confinements. There have been a few cases at the East end of the town and Low Pallion, both districts lamentably short of medical and midwifery aid.

The mode of procedure has been:—After the completion of the case a doctor was sent for, a plea of emergency put in, and he for a small fee signed the maternity benefit form, and held himself nominally responsible for the period of the puerperium. Unfortunately this covered the uncertified midwife. Before the end of the year, however, the practice virtually ceased.

TUBERCULOSIS.

At the end of the year there were 519 cases of tuberculosis being visited by the Health Visitors, distributed as follows:—

East District	.....	194
West	„	176
North	„	149

During the visit instructions were given verbally and by leaflet on the prevention of infection.

Insanitary conditions and structural defects were noticed and reported to the Medical Officer of Health.

Where possible a history of the disease was obtained and an effort made to find out the probable source of infection. Contacts were noticed, and where there appeared to be symptoms of tuberculosis, persuasion was used to seek medical aid. In cases among the very poor the help of the Relieving Officer was sought.

Sputum flasks and disinfectant were also supplied.

Of the cases notified during 1913, 137 died before December 31st.

The occupation of the sufferers notified during the year is as follows :—

Children under Five Years..	61	Painters	4
Shipyard Workers and		Glassmakers	4
Labourers	71	Hawkers	4
Housewives	60	Ropery Workers	4
Shop Assistants	28	Nurses	3
Domestic Servants	14	Sailors	3
Enginemen	10	Brushmakers	2
Laundry Workers	8	Bakers	2
Miners	8	Stone Dressers	2
Cartmen	7	Blacksmiths	2
Clerks	7	Sweep	1
Joiners	7	Bricklayer	1
Agents	5	Gardener	1
Coal Trimmers	5	Plumber	1
School Teachers	4	Paper Mill Worker	1
Dressmakers	4	French Polisher	1
School Children	199	All others of no stated occupation.	

I am, Sir,

Your obedient Servant,

MARY E. BARBER.

DISTRICTS COMPARED.

The following Table shows, for the East, West, and North Districts, the death rate from the principal causes in children under the age of one year per 1,000 births.

Cause of Death.	East District.	West District.	North District.
Measles.....	2·2	2·6	2·8
Diarrhoeal Diseases	26·8	16·9	31·2
Congenital Defects.....	3·3	2·1	1·8
Gastritis	3·8	2·6	1·8
Atrophy, Debility and Marasmus and Debility at Birth	21·9	24·4	30·3
All Tubercular Diseases.....	3·8	0·5	4·6
Premature Birth.....	25·2	24·9	21·1
Syphilis	3·8	1·5	0·9
Simple Meningitis	3·8	0·0	6·4
Convulsions	4·9	1·5	8·2
Bronchitis	22·9	11·6	11·0
Pneumonia	13·7	13·2	13·8
Suffocation (over-laying)	1·6	1·5	0·0
Whooping Cough	3·8	1·1	1·8
All Causes	148	140	146

NUMBER OF DEATHS
UNDER 1 YEAR, PER
1000 BIRTHS.

CHART No 19.
COMPARISON OF THE INFANTILE
MORTALITY IN THE EAST, WEST,
AND NORTH DISTRICTS
FROM 1905 TO 1913.

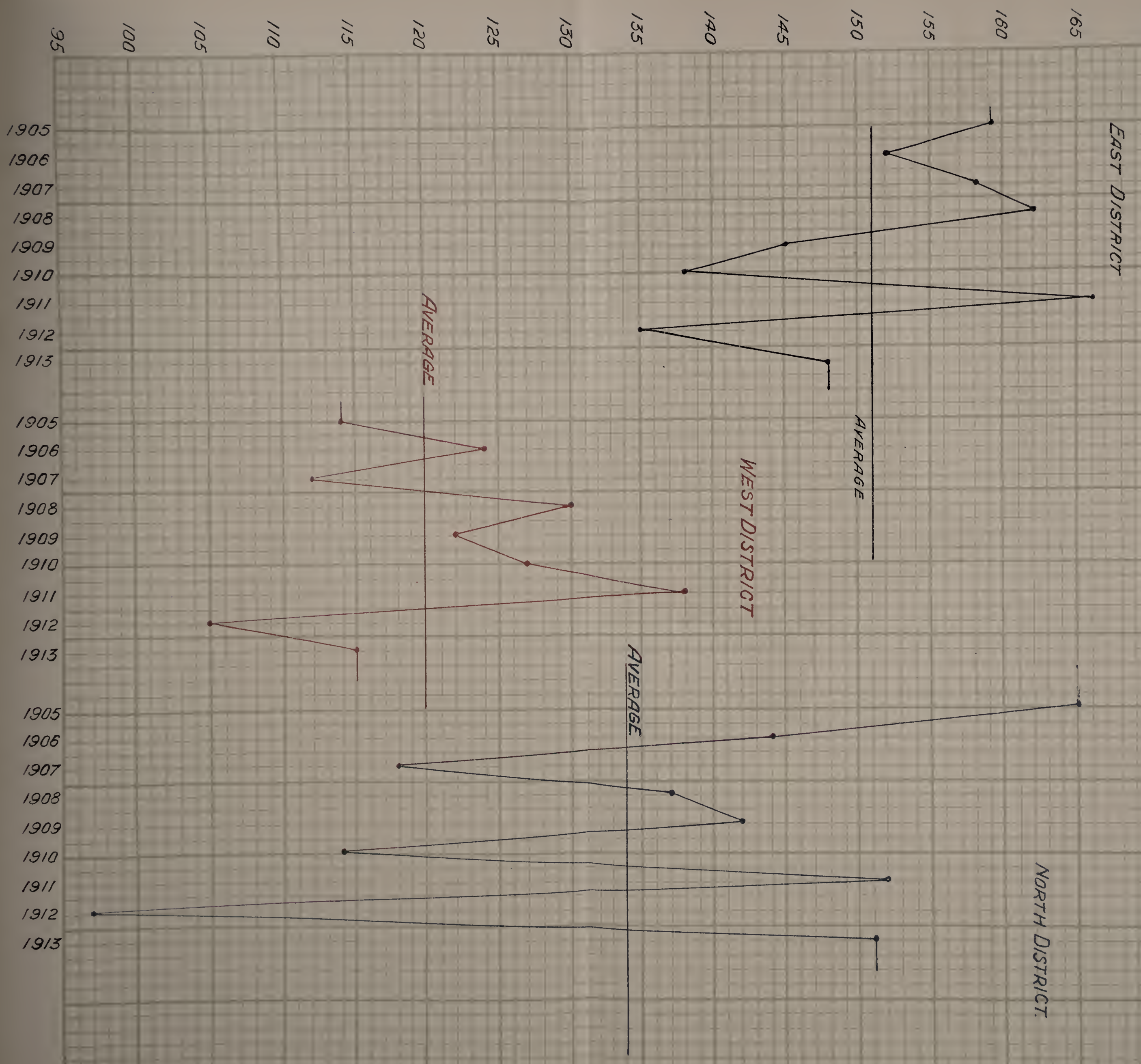
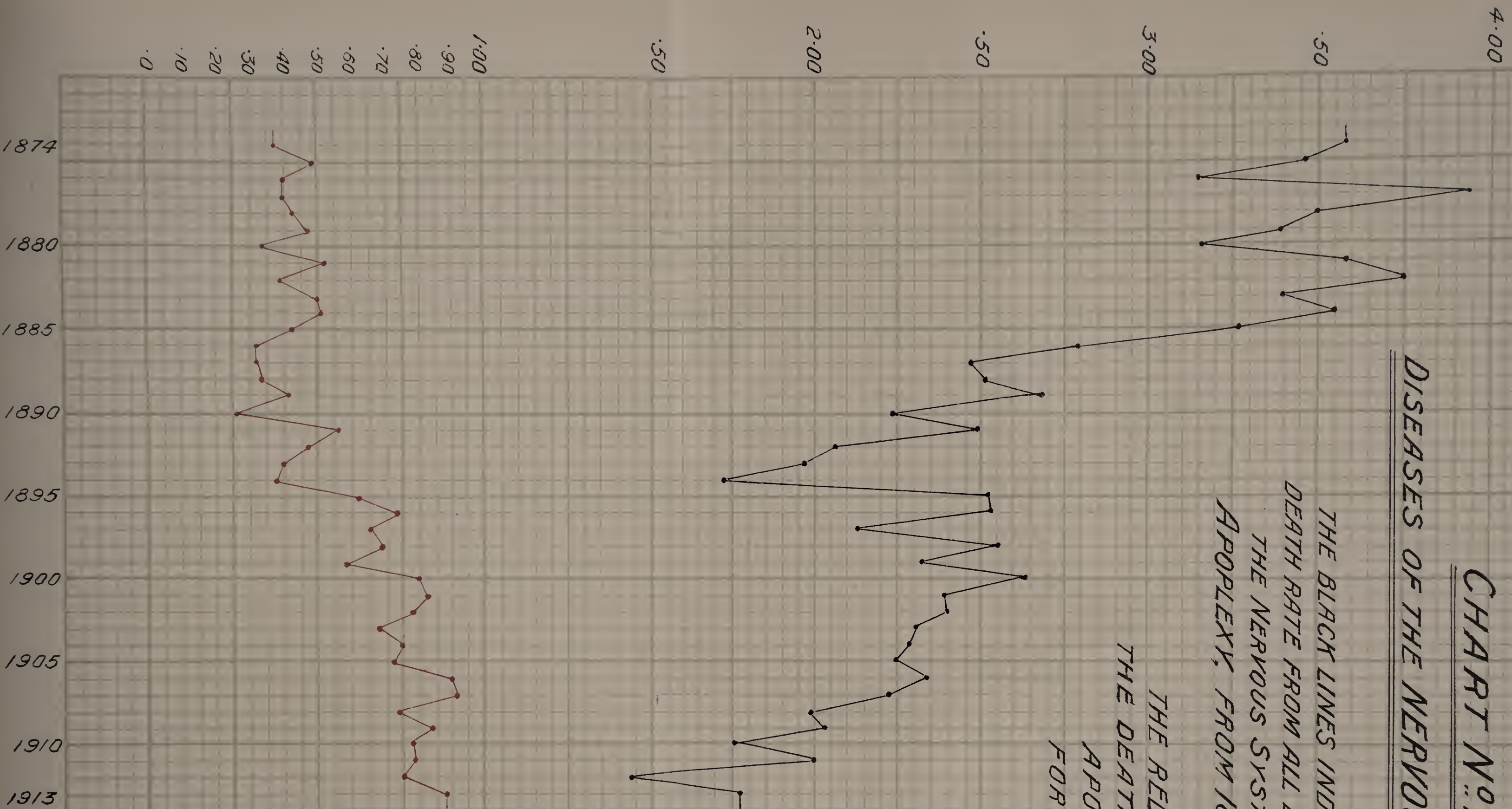


CHART No. 20.

DISEASES OF THE NERVOUS SYSTEM

THE BLACK LINES INDICATE THE
DEATH RATE FROM ALL DISEASES OF
THE NERVOUS SYSTEM, INCLUDING
APOPLEXY, FROM 1874 TO 1913.

THE RED LINES SHOW
THE DEATH RATE DUE TO
APOPLEXY ONLY,
FOR THIS PERIOD.



The following Table shows the Death-rate of children under the age of 1 year per 1,000 births, from all causes and from the Principal causes of Death in the several Wards of the Borough.

Cause of Death.	Bishopwearmouth Ward.	Bridge Ward.	Central Ward.	Colliery Ward.	Deptford Ward.	East Ward.	Hendon Ward.	Monkwearmouth Ward.	Monkwearmouth-Shore Ward.	Pallion Ward.	Park Ward.	Roker Ward.	Saint Michael's Ward.	Sunderland Ward.	Thornhill Ward.	West Ward.
Measles.....	3.5	2.2	0.0	0.0	2.9	3.1	0.0	4.3	2.8	2.8	6.9	4.1	0.0	0.0	8.2	0.0
Diarrhoeal Diseases	17.5	15.4	46.9	47.4	29.2	40.0	29.7	38.5	33.4	16.9	17.2	4.1	15.5	13.2	8.2	13.6
Congenital Defects.....	3.5	0.0	0.0	3.9	2.9	0.0	3.7	0.0	2.8	0.0	6.9	0.0	0.0	5.3	8.2	3.4
Atrophy, Debility and Marasmus and Debility at Birth	7.0	19.8	36.1	39.5	26.2	15.4	14.9	29.9	36.2	25.3	30.9	12.3	31.1	26.4	24.7	23.8
All Tuberculous Diseases.	3.5	0.0	0.0	7.9	2.9	3.1	3.7	0.0	2.8	0.0	0.0	8.2	0.0	10.5	0.0	0.0
Premature Birth.....	42.0	39.6	25.3	19.7	26.2	27.7	3.7	17.1	27.8	14.1	17.2	16.4	15.5	31.6	20.6	23.8
Simple Meningitis	3.5	0.0	3.6	3.9	0.0	6.2	0.0	4.3	8.4	0.0	3.4	8.2	0.0	5.3	0.0	0.0
Convulsions	14.0	2.2	0.0	3.9	0.0	0.0	7.4	12.8	8.4	0.0	3.4	8.2	5.2	5.3	4.1	0.0
Bronchitis	21.0	22.0	21.7	7.9	14.6	24.6	18.6	4.3	22.2	8.5	24.0	4.1	10.4	26.4	0.0	6.8
Pneumonia	3.5	13.2	3.6	7.9	20.4	43.1	11.1	12.8	19.4	14.1	0.0	12.3	5.2	15.8	12.4	10.2
Suffocation (overlying)...	0.0	4.4	3.6	0.0	0.0	0.0	3.7	0.0	0.0	2.8	0.0	0.0	0.0	2.6	0.0	0.0
Whooping Cough.....	7.0	2.2	0.0	0.0	0.0	0.0	7.4	0.0	2.8	0.0	3.4	8.2	5.2	5.3	0.0	0.0
All Causes	143.8	142.8	173.3	162.0	140.3	178.5	111.5	132.5	172.4	87.5	120.3	104.1	103.6	155.7	99.2	95.2

NEW HOUSES.

The following is the Report of the work performed by the Inspector of Drains and Sanitary Fittings in New Houses during the year:—

Number of visits made.....	4,596
Number of Tests applied to Drains and Sanitary Fittings:—	
Water Tests	1,847
Smoke Tests	229
	<hr/>
Total	2,076
Number of Certificates sent to the Borough Engineer	18
Number of cases where it was found necessary to order concrete foundations for drains	447
Approximate length of drains laid	18,276 feet.

REPORT ON CORPORATION PATIENTS SENT TO THE STANHOPE AND WOLSINGHAM SANATORIA.

Since June, 1901, 109 patients have been treated in the Stanhope and Wolsingham Sanatoria as Corporation Patients.

Of these, 61 are dead, 10 are well, 11 fairly well, 3 are ill, and 24 cannot be traced.

Of those who died, the average duration of life after discharge from the Sanatoria was $1\frac{3}{4}$ years.

Of the 24 still under observation:—

One has been at work for $12\frac{1}{4}$ years.			
One	„	„	$11\frac{1}{2}$ „
One	„	„	$8\frac{3}{4}$ „
One	„	„	$7\frac{3}{4}$ „
Three have	„	„	$7\frac{1}{4}$ „
Two have	„	„	5 „
Two have	„	„	$4\frac{1}{2}$ „
Three have	„	„	$2\frac{1}{2}$ „
Three have	„	„	$2\frac{1}{4}$ „
One has	„	„	$1\frac{1}{2}$ „
One has	„	„	1 „
Two have	„	„	6 months,

The remaining 3 are too ill to work.

HOUSING (INSPECTION OF DISTRICTS) REGULATIONS, 1910.

Number of dwelling-houses inspected under and for the purpose of Section 17 of the Act of 1909	1,018
Number of dwelling-houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	123
Number of Representations made to the Local Authority with a view to the making of Closing Orders	123
The number of Closing Orders made was	121
Number of dwelling-houses in which defects were remedied without making Closing Orders	2
Number of dwelling-houses which, after the making of Closing Orders were put into a fit state for human habitation	46
Under consideration, or repair	75

The general character of the defects found consisted of obstructive outbuildings, faulty roofs, damp walls, dilapidated floors and ceilings, windows which were without sash-cords and which could not be opened, want of proper air-space at the rear of the house, insufficient lighting, and defective yard pavements.

The administration of the Act has been generally effected without friction and has been productive of great improvements from a Public Health point of view in the localities where it has been necessary to put it in force.

THE HARRISON BUILDINGS.

The Tenth Annual Report of the Harrison Buildings, made by the Superintendent, Mr. Joseph D. Ward.

On December 31st, 1912, there were 80 houses occupied, viz., 34 consisting of three rooms, and 46 consisting of two rooms each. Four houses were unoccupied, viz., 2 of three rooms and 2 of two rooms each, as against 10 at the end of 1912.

The rent collected during the year amounts to £906 2s. 5d., compared with £695 19s. 3d. in 1912, an increase of £210 3s. 2d., making the total amount of rent collected since the houses were opened to be £6,299 11s. 8d.

The arrears of rent amounted to £11 12s. 10d., as against £10 2s. 4d. for last year, an increase of £1 10s. 6d.

The following Table shows the amount of rent collected for each year, and the arrears of rent :—

Year.	Rent Collected.			Arrears.		
	£	s.	d.	£	s.	d.
*1903	65	0	11	...		
1904	492	6	7	0	17	6
1905	709	4	3	3	9	3
1906	889	15	0	1	13	0
1907	867	16	3	8	14	8
1908	726	17	5	33	9	1
1909	403	5	0	20	6	10
1910	289	7	3	19	15	6
1911	253	17	4	10	1	10
1912	695	19	3	10	2	4
1913	906	2	5	11	12	10
Total ...	£6299	11	8			

* The buildings were opened in September, 1903.

Of the 74 tenants at present occupying houses :—

4 have been in for 10 years.
 2 „ „ 8 „
 1 has „ „ 7 „
 4 have „ „ 6 „
 25 „ „ 2 „
 16 „ over 1 year.
 28 „ under 1 „

There have been 19 births and 7 deaths during the year 1913, and 2 cases of Infectious Diseases (Scarlet Fever).

The population of the houses at the end of 1913 numbered 333 persons, an average of 1·7 persons to every occupied room.

The following Table shows the population, number of Births, Deaths and cases of Infectious Disease occurring since the opening of the Buildings.

Year.	Population.	Births.	Deaths.	Infectious Diseases.
1904	234	10	4	Nil.
1905	305	15	4	Nil.
1906	335	17	7	12
1907	286	20	4	4
1908	190	14	2	Nil.
1909	182	11	3	1
1910	84	3	2	2
1911	195	3	1	Nil.
1912	316	16	5	Nil.
1913	333	19	7	2

The Medical Officer of Health wishes to add that the Superintendent has performed his duties in his usual conscientious and efficient manner.

CLEANSING DEPARTMENT, 1913.

SUPERINTENDENT'S REPORT.

RETURN shewing the number of HOUSE SCAVENGING LOADS
REMOVED, INHABITED HOUSES, Etc., for
ten years (1904—13):—

Year.	No. of Inhabited Houses.	No. of Horses' days' work for each year.	Average number of Horses employed per working day.	No. of Cart Loads of Refuse removed.
1904	22,798	13,034	41.78	68,036
1905	23,105	13,196	42.30	68,692
1906	23,455	13,170	42.21	67,234
1907	23,694	13,154	42.16	66,915
1908	23,899	13,077	41.12	66,305
1909	No record.	12,590	40.35	(53 weeks) 63,812
1910	do.	12,320	39.49	61,933
1911	do.	12,602	39.63	63,066
1912	do.	12,259	39.29	(53 weeks) 61,906
1913	do.	12,191	39.07	61,113

The number of working days during the year was 307.

The Department was responsible for the cleansing of, approximately, 4,730 ashpits and privy pans, 17,320 moveable bins, 2,870 fixed bins, and the pails, tubs, etc., of 330 houses at the East End.

The ashpit work is dealt with by a night staff, and the ashbins by a day staff.

In addition to the above, a special day collection is made from shops, warehouses, and offices of waste paper and other easily combustible refuse, in sacks.

14,727 loads of street sweepings were removed during the year under review. 17,045 van loads of water were distributed on the streets and roads, in addition to the watering of the tram routes by the electric tram tank. For the latter service 5s. per hour is paid to the Tramways Department.

55,086 cart loads of refuse were sent to sea by hoppers. The carcasses of 512 dogs were removed from the Police Station, East Cross Street, and destroyed by fire.

In addition to the loads of house scavenging refuse referred to in the Table, 67,583 sacks of waste paper were collected and burnt or otherwise disposed of, and 1,162 mattresses were collected and burnt.

During the year, 372 ashpits were specially cleansed prior to their abolition.

4,461 loads were removed from street gullies and screen chambers. The daily average number of horses employed on this work was at the rate of $4\frac{1}{2}$.

The daily average number of horses employed in cleansing, watering, and sanding paved streets and macadam roads was at the rate of 16.

393 loads of grit were distributed on the wood block pavements during frosty or "greasy" weather.

In addition to the work above enumerated, the Department is responsible for the efficient daily cleansing of the 51 Public Urinals and 9 Public Water Closets in the Borough.

SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1913.

Months.	Barometer.	Mean Temperature.	Mean of Maximum.	Mean of Minimum.	Mean Temperature of 1 foot.	Mean Temperature of 4 feet.	Mean Humidity.	No. of days rain fell.	Total Rainfall.	Direction of Wind. Number of Days.							
										N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
January	29.762	38.5	41.9	34.7	38.5	42.2	86.7	19	3.94	...	1	..	10	8	5	4	3
February	30.107	40.7	46.1	35.9	39.0	41.4	88.8	6	.42	...	5	...	2	5	7	6	3
March	29.728	42.7	47.2	36.1	39.6	41.5	84.6	15	2.49	...	...	1	3	3	13	9	2
April	29.843	46.4	50.3	40.1	42.9	43.2	77.7	12	3.24	4	4	...	7	3	8	3	1
May	29.880	50.3	54.6	44.1	47.6	46.3	85.4	13	2.48	3	4	4	5	5	3	5	2
June	30.013	57.9	51.9	49.6	54.3	51.2	73.5	11	1.26	1	5	1	4	3	4	11	1
July	30.074	57.1	60.4	49.9	55.4	54.3	85.5	5	.39	8	3	4	2	2	3	6	3
August	30.055	58.1	64.0	51.1	56.2	55.0	82.0	12	.82	5	6	1	4	...	3	9	3
September	30.002	56.5	60.7	51.5	57.4	55.2	84.4	13	2.54	3	7	3	6	2	2	4	3
October	29.848	52.0	55.4	46.5	51.1	53.5	77.9	11	1.66	1	3	8	6	3	6	2	2
November.....	29.733	45.4	51.4	41.4	45.7	49.4	78.9	12	1.12	...	...	1	1	4	4	17	3
December	29.965	41.1	45.3	36.6	42.1	45.7	84.2	9	1.17	1	...	...	..	2	6	17	5
Totals .....	...	...	...	...	...	...	...	138	* 21.53	26	38	23	50	40	64	93	31
Averages.....	29.918	48.9	52.4	43.1	47.5	48.2	82.4	...	...	...	..	...	...	...	...	...	...

* The average rainfall for the last 39 years is 25.58 inches.

Annual Report of the Medical Officer of Health for the Year 1913 for the *County Borough of Sunderland on the administration of the Factory and Workshop Act, 1901, in connection with Factories, Workshops, Workplaces, and Homework.

1.—Inspection of Factories, Workshops, and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises. (1)	Number of		
	Inspections (2)	Written Notices. (3)	Prosecu- tions. (4)
Factories (Including Factory Laundries)	376	30	...
Workshops (Including Workshop Laundries)	1508	95	...
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	214	29	...
Total	2098	154	...

2—Defects found in Factories, Workshops, & Workplaces.

Particulars. (1)	Number of Defects.			Number of Prosecu- tions. (5)
	Found. (2)	Re- mediated. (3)	Referred to H.M. Inspec- tor. (4)	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness	55	55	...	...
Want of ventilation	2	2	...	...
Overcrowding	3	3	...	...
Want of drainage of floors	6	6	...	...
Other nuisances	65	65	...	...
Sanitary { insufficient	9	8	...	..
Accommo- { unsuitable or defective	5	5	...	...
dation. { not separate for sexes	1	1	...	...
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bake- houses (s. 101) .....	...	...	...	...
Breach of special sanitary requirements for bakehouses (ss. 97 to 100).....	40	40	...	...
<i>Other offences :—</i> (Excluding offences relating to outwork which are included in Part 3 of this Report).	23	23	...	...
Total	209	208	...	...

* Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

3.—HOME WORK.

Nature of Work. *	Outworkers' Lists, Section 107.										Outwork in Unwhole- some Premises, Section 108.			Outwork in Infected Premises, Sections 109, 110.		
	Lists received from Employers.		Sending twice in the year.		Sending once in the year.		Prosecutions.			Prosecutions.			(14) Instances.	(15) Orders made (S. 110.)	(16) Prosecutions. (Sections 109, 110.	
																Prosecutions.
	Prosecutions.			Prosecutions.			Prosecutions.			Prosecutions.						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)			
Wearing Apparel :—																
Making, etc.	138	129	143	...	...	...	138	...	...	2	2	...	...	...	...	...
Cleaning and Washing.....
Household Linen
Lace, lace curtains and nets.....
Curtains and furn. hangings.....
Furniture and Upholstery
Electro-Plate
File Making
Brass and Brass articles
Fur pulling
Cables and Chains
Anchor and Grapnels
Cart Gear.....
Locks, Latches, and Keys.....
Umbrellas, &c
Artificial Flowers
Nets, other than Wire Nets.....
Tents
Sacks
Racquet and Tennis Balls.....
Paper, etc. boxes, paper bags
Brush Making.....
Pea Picking.....
Feather Sorting
Carding, &c., of Buttons, &c.....

SALE OF FOOD AND DRUGS ACTS.

Report of the Public Analyst appointed for the County Borough of Sunderland upon the articles analysed by him under the above Acts.

I.—THE QUARTER ENDED 31st MARCH, 1913.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Milk 48	By an Officer acting under direction of the Boro' Council.	Genuine	All milk, butter, and margarine samples examined for preservatives
No. 34		Def. in fat, 20 per cent ; in non-fatty solids 12·4 per cent.	
„ 42		Def. in fat, 11·6 per cent. ...	
„ 47		do. 3·3 per cent. ...	
„ 49		do. 13·3 per cent. ...	
„ 54		do. 3·3 per cent. ...	
„ 57		Def. in non-fatty solids, 2·3 per cent.	
„ 59		Def. in non-fatty solids, 5·9 per cent.	
„ 60		Def. in fat, 13·3 per cent. ...	
„ 61		do. 21·7 per cent. ...	
„ 63		do. 5·0 per cent. ...	
„ 69		do. 8·3 per cent. ; in non-fatty solids, 4·6 per cent.	
„ 72		Def. in fat, 3·3 per cent. ...	
„ 73		do. 16·6 per cent. ...	
„ 81		do. 10·0 per cent ; in non-fatty solids, 13·2 per cent.	
„ 84		Def. in fat, 6·6 per cent. ...	
„ 85		do. 5·0 per cent. ...	

QUARTER ENDING 31st MARCH, 1913.—(Continued.)

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations
No. 110		Def. in non-fatty solids 7·6 per cent.	
„ 113		Def. in fat, 3·3 per cent ; in non-fatty solids, 12·7 per cent.	
Butter.....6		Genuine	Informal
Margarine .....5		All contained boric acid, under 0·5 per cent. doubtful	do.
Lard .....4		Genuine	do.
Preserved Cream..... 1		Genuine, contained 0·21 per cent. boric acid	do.
No. 29		Contained 0·26 per cent boric acid (under de- clared percentage, but above limit of 0·25 per cent. suggested by De- partmental Commission on preservatives)	Doubtful Informal
„ 30		Contained 0·43 per cent. boric acid (under de- clared percentage, but above limit of 0·25 per cent. suggested by De- partmental Commission on preservatives)	Doubtful Informal
Compound Liquorice Powder .....5		Genuine	Informal
Gregory's Powder .....4		Genuine	do.
No. 107		Contained 3 pts. calc. and 2 pts. carb. Magnesia ...	do.
Linseed Oil.....3		Genuine	do.
Camphorated Oil .....2		Genuine	do.
No. 20		Contained Mineral Oil in- stead of Olive Oil	do.
„ 90		Contained Mineral Oil and def. in Camphor, 50 per cent.	
Seidlitz Powders .....2		Genuine	Informal
Citric Acid.....2		Genuine, free from lead and arsenic	do.
Acetic Acid .....1		Genuine and B.P. strength..	do.
Cream of Tartar .....1		Genuine, free from lead and arsenic	do.

QUARTER ENDING 31st MARCH, 1913.—Continued.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Borax ... ..1		Genuine	Informal
Tartaric Acid . ....1		Genuine, free from lead and arsenic	do.
Carbonate of Magnesia 1		Genuine	do.
Cod Liver Oil.....1		do.	do.
Castor Oil .....2		do.	do.
Saffron .....1		do.	do.

Genuine Samples 86
Non-Genuine Samples 21
Doubtful do. 7

—
114
—

2.—QUARTER ENDED 30th JUNE, 1913.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Milk .....42	By an Officer acting under direction of the Boro' Council.	Genuine	All milk and butter samples examined for preservatives
No. 121		Def. in fat, 5·0 per cent.....	
„ 122		do. 8·3 per cent.....	
„ 200		Def. in non-fatty solids, 4·9 per cent.....	
„ 218		Def. in fat, 3·3 per cent....	
„ 221		do. 13·3 per cent.....	
Skim Milk .....1		Genuine.....	10 of these informal
Butter .....12		Genuine.....	
Nos. 156, 170, 177		Contained below 0·5 per cent. of boric acid, hence doubtful genuineness	Informal
Nos. 191 195, 196		Contained respectively 0·06, 0·05, 0·06, per cent of boric acid, sold as “fresh” butter	
Lard .....8		Genuine.....	do.
Dripping..... 3		Genuine.....	do.
Cheese, Nos. 153, 157, 162.....		Contained respectively 10·5, 3·1, 5·1 per cent. of fat; far below what cheese should contain	do.
Baking Powder.....5		Genuine (1 contained phosphates, the others tartaric acid)	do.
‘ Fruit Wine,’ No. 190		Contained no fruit juice.....	do.
Sausage .....2		Genuine.....	
Nos. 223-4-5-7-9-230		Contained respectively 48, 29, 18, 21, 32, 19 grains per lb of boric acid; non-genuine because of this ...	do.
Camphorated Oil .....3		Genuine.....	do.
Castor Oil .....6		Genuine.....	do.

QUARTER ENDING 30th JUNE, 1913.—Continued.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations
Gregory Powder .....5		Genuine.....	Informal
Seidlitz Powder.....3		Genuine.....	do.
Liquorice Powder.....3		Genuine..	do.
"Magnesia" ... ..1		Genuine. Labelled on packet, "Carbonate of Magnesia," actually such...	do.
No. 180		Labelled on packet "Calcined Magnesia," contained only 40 per cent., rest being Carbonate and moisture	do

Genuine Samples	94
Of Doubtful Genuineness	6
Non-genuine	16
	<hr/> 116 <hr/>

3.—QUARTER ENDED 30th SEPTEMBER, 1913.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Milk .....22 No. 248 No. 251 Butter .....11 Nos. 265 and 280 Lard .....5 Coffee .....No. 231 235 243 246 292 293 Cocoa .....4 Dripping.....3 No. 274 Baking Powder.....9 Mustard .....6 Pepper .....6	By an Officer acting under direction of the Boro' Council.	Genuine Def. in fat, 6·6 per cent..... Def. in non-fatty solids, 2·3 per cent... Genuine.. Contained boric acid 0·5 per cent. Genuine... Contained chicory, 37·4 per cent..... " 40 per cent..... " 49 per cent..... " 56 per cent..... " 30 per cent..... " 76 per cent..... Genuine..... Genuine..... Contained 30-40 per cent of cotton seed stearine Genuine..... Genuine..... Genuine	All milk and butter samples examined for preservatives Doubtful : preservative not declared. All of these samples except those of Milk were informal.

Genuine Samples 66
Non-Genuine Samples 9
Doubtful do. 2

77

4.—QUARTER ENDED 31st DECEMBER, 1913.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations
Milk .....11	By an Officer acting under direction of the Boro' Council.	Genuine	All milk, butter, and margarine samples examined for preservatives.
Butter.....1		Def. in fat, 3·3 per cent.	Informal
No. 328		Genuine.....	Informal, doubtful genuineness as contained preservative not declared
No. 313		Contained 0·25 per cent. of boric acid	
Dripping.....No. 310		Contained at least 40 per cent. of cotton seed oil or stearine	
Coffee .....No. 311		Contained 79 per cent. of chicory	
Cocoa .....1		Genuine.....	Informal
Jam.....3		Genuine.....	Informal, 2 declared "Improved with fruit jelly"
Syrup .....1		Genuine.. ..	Informal
Cream of Tartar .....1		Genuine.....	do.
Citric Acid.....1		Genuine.....	do.
Tartaric Acid.....1		Genuine.....	do.
Magnesia .. ..1		Genuine (Carbonate)	do.
No. 308		Contained only 1 per cent. magnesium sulphate: rest sodium bicarbonate, citric acid and sugar	
No. 314		Contained under 4 per cent. magnesium sulphate: rest sodium bicarbonate, citric acid and sugar	Informal
Seidlitz Powder.....1		Genuine.....	do.
Gregory's Powder .....2		Genuine.. ..	do.
Castor Oil .....1		Genuine.....	do.

Genuine Samples..... 25
Non-Genuine Samples 5
Doubtful Samples 1

31

SUMMARY FOR THE YEAR.

Genuine Samples examined... 271
Non-Genuine „ ... 41
Doubtful „ ... 26

338

J. T. DUNN, Public Analyst.

APPENDIX.

VITAL AND SANITARY
STATISTICS,

TOGETHER WITH

Tables required by the Local
Government Board.

1913.

LOCAL GOVERNMENT BOARD TABLE I.

Vital Statistics of Whole District during 1913 and previous Years.

Year.	Population estimated to Middle of each year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Un- corrected Number.	Nett		Number. 6	Rate. 7	of Non- residents registered in the District. 8	of Resi- dents not registered in the District 9	Under 1 Year of Age.		At all Ages.	
			Number. 4	Rate. 5					Number. 10	Rate per 1,000 Nett Births. 11		
												Number. 12	Rate. 13
1	2	3	4	5	6	7	8	9	10	11	12	13
1908	149,746	5180	..	...	2754	18·3	...	...	...	...	...	...
1909	150,259	4765	..	...	2763	18·3	...	...	..	...	...	...
1910	150,774	4582	...	...	2548	16·9	...	...	...	...	...	...
1911	151,291	4519	4512	29·8	2782	18·3	126	82	684	151	2738	18·0
1912	151,835	4754	4749	31·3	2482	16·3	124	67	549	115	2425	15·9
1913	152,380	4798	4792	31·4	2846	18·6	157	80	646	135	2769	18·1

Area of District in acres, 3,357.

Total population at all ages, 151,162, at Census of 1911.

LOCAL GOVERNMENT BOARD TABLE II.

Cases of Infectious Disease notified during the year 1913.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.							TOTAL CASES NOTIFIED IN EACH LOCALITY. (e.g. Parish or Ward) of the District.																Total Cases Removed to Hospital.				
	All all Ages.	At Ages — Years.						Central Ward.	Sunderland Ward.	East Ward.	Park Ward.	Bishopwearmouth Ward.	Hendon Ward.	East Sub-District.	Pallion Ward.	Deptford Ward.	Bridge Ward.	Saint Michael's Ward.	West Ward.	Thornhill Ward.	West Sub-District.	Monkwearmouth Ward.	Colliery Ward.		Roker Ward.	Monkwearmouth-Shore Ward.	North Sub-District.	
		Under 1.	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.																					65 and upwards.
Smallpox																												
Cholera																												
Diphtheria (including Membranous Croup	181	3	38	113	15	10	2	5	3	1	3	8	11	31	9	12	9	5	32	39	106	7	9	26	2	44		
Erysipelas	105							8	11	9	4	7	6	45	9	2	17	4	16	6	54	1		4	1	6		
Scarlet Fever	779	3	181	540	42	12	1	52	75	24	76	110	119	456	47	28	30	22	72	73	272	16	5	20	10	51	559	
Typhus Fever																												
Enteric Fever	40		2	14	12	10	2	5	4	1	4	2	2	18	1	4	4	1	...	3	13	1	3	3	2	9	36	
Continued Fever	2				1	1									1			1	...	...	2					1		
Puerperal Fever	2												1	1			1	...	...	...	1							
Cerebro-spinal Meningitis																												
Polomyelitis	1								1					1														
Pulmonary Tuberculosis	357	1	13	58	98	134	52	1	35	35	19	24	16	30	159	16	21	38	11	17	21	124	26	12	13	23	74	76
Other forms of Tuberculosis	228	12	27	109	47	23	10		8	21	5	15	10	21	80	14	16	21	4	28	18	101	9	11	15	12	47	
Totals	1695							113	150	59	126	153	190	791	97	83	120	48	165	160	673	60	40	81	50	231	672	

TABLE III.

Causes of, and Ages at Death during the Year 1913.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the district.									Total Deaths whether of "Residents" or "Non- Residents" in Institu- tions in the District.
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
All Causes { Certified { Uncertified	2728 41	632 14	229 ...	150 1	136 ...	94 ...	322 3	571 14	594 9	630 ...
Enteric Fever	3	..	...	...	1	...	2	...	...	...
Smallpox .....	...	...	...	...	...	...	...	...	...	...
Measles.....	79	12	35	26	6	...	...	...	...	...
Scarlet Fever	19	...	1	8	9	...	1	...	...	...
Whooping Cough... ..	19	11	1	6	1	...	...	...	...	...
Diphtheria and Croup	22	2	1	9	10	...	...	...	...	1
Influenza	5	...	...	...	...	...	...	4	1	1
Erysipelas.....	1	...	...	...	...	...	...	...	1	1
Phthisis (Pulmonary Tuber- culosis)	173	2	3	1	19	27	80	41	...	48
Tuberculous Meningitis.....	30	5	6	4	11	2	1	1	...	7
Other Tuberculous Diseases	51	6	11	10	10	1	8	3	2	20
Cancer (Malignant Disease) ..	159	...	...	...	...	...	24	89	46	46
Rheumatic Fever	4	...	...	...	...	1	1	2	...	1
Meningitis	40	14	5	9	7	...	5	...	...	5
Organic Heart Disease	254	1	1	1	8	9	26	121	87	61
Bronchitis	273	76	24	12	4	2	13	55	87	32
Pneumonia (all forms)	266	65	43	29	13	15	27	47	27	39
Other Diseases of Respiratory Organs	20	1	...	...	...	...	5	9	5	...
Diarrhoea and Enteritis.....	187	118	57	5	3	...	2	...	2	16
Appendicitis and Typhlitis	10	...	...	...	3	2	4	1	...	16
Cirrhosis of Liver	21	...	...	...	...	...	5	12	4	2
Alcoholism	1	...	...	...	...	...	...	...	1	...
Nephritis and Bright's Disease...	85	1	4	3	3	2	16	35	21	20
Puerperal Fever	2	...	...	...	...	1	1	...	...	2
Other Accidents and Diseases of Pregnancy and Parturition	22	...	...	...	...	6	15	1	...	3
Congenital Debility and Mal- formation, including Pre- mature Birth.....	247	247	...	...	...	...	...	...	...	9
Violent Deaths, excluding Suicide	96	11	8	10	9	10	25	17	6	83
Suicide	17	...	...	...	...	1	6	10	...	4
Other Defined Diseases	661	74	29	18	19	15	58	137	311	215
Diseases ill-defined or unknown.	2	...	...	...	...	...	...	...	2	...
	2769	646	229	151	136	94	325	585	603	632
Sub-entries (included in above)—										
Lobar Croupous Pneumonia ...	45	1	2	2	3	3	12	15	7	
Pneumonia, form not stated...	103	10	11	7	5	12	14	30	14	

TABLE IV.
WHOLE BOROUGH.
INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under 1 Year of of Age.

Causes of Death.	Under 1 week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under 1 Year.
All causes { Certified	155	23	37	15	230	97	121	90	94	632
{ Uncertified	6	.....	.....	.....	6	.....	2	2	4	14
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chickenpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles .....	.....	.....	.....	1	1	1	2	3	5	12
Scarlet Fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough.....	.....	.....	.....	.....	.....	3	3	3	2	11
Diphtheria and Croup.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2
Erysipelas .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculous Meningitis.....	.....	.....	.....	.....	.....	.....	1	2	2	5
Abdominal Tuberculosis .....	.....	.....	.....	.....	.....	.....	1	1	1	3
Other Tuberculous Diseases .....	.....	.....	.....	.....	.....	.....	1	2	2	5
Meningitis (<i>not Tuberculous</i>) .....	.....	.....	.....	.....	.....	1	6	4	3	14
Convulsions	8	2	.....	1	11	2	4	1	3	21
Laryngitis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bronchitis	1	4	4	3	12	21	17	17	9	76
Pneumonia (all forms)	1	.....	1	1	3	6	11	16	29	65
Diarrhoea .....	.....	.....	1	.....	1	5	19	12	10	47
Enteritis .....	.....	.....	1	.....	1	15	24	13	15	68
Gastritis .....	.....	.....	2	.....	2	5	5	1	1	14
Syphilis.....	.....	1	.....	.....	1	5	4	1	.....	11
Rickets .....	.....	.....	.....	.....	.....	.....	.....	.....	2	2
Suffocation, overlying.....	2	.....	1	.....	3	1	2	.....	.....	6
Injury at Birth	6	.....	.....	.....	6	.....	.....	.....	.....	6
Atelectasis	6	.....	1	.....	7	.....	.....	.....	.....	7
Congenital Malformations.....	6	1	2	.....	9	.....	2	1	.....	12
Premature Birth.....	93	6	10	3	112	4	.....	.....	.....	116
Atrophy, Debility and Marasmus	37	8	13	3	61	24	16	10	8	119
Other Causes	1	1	1	3	6	4	5	5	4	24
Totals	161	23	37	15	236	97	123	92	98	646

Nett Births in { Legitimate...4633. Nett Deaths in { Legitimate Infants... 611.
the year. { Illegitimate.. 159. the year of { Illegitimate ,, ... 35.

TABLE IV. (A.)
SUNDERLAND EAST SUB-DISTRICT.
INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

Causes of Death.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under 1 Year.
All causes	Certified	58	13	13	4	88	38	57	42	43	268
	Uncertified	2	.....	.....	.....	2	.....	1	.....	.....	3
Smallpox .....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chickenpox .....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles... ..		.....	.....	.....	.....	.....	.....	1	.....	3	4
Scarlet Fever .....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough.....		.....	.....	.....	.....	.....	2	2	2	1	7
Diphtheria and Croup .....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Erysipelas.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculous Meningitis .....		.....	.....	.....	.....	.....	.....	.....	1	1	2
Abdominal Tuberculosis .....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other Tuberculous Diseases .....		.....	.....	.....	.....	.....	.....	1	2	2	5
Meningitis (<i>not Tuberculous</i>) ..		.....	.....	.....	.....	.....	.....	4	1	2	7
Convulsions		4	2	.....	.....	6	1	1	1	.....	9
Laryngitis .....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bronchitis		1	3	2	2	8	9	10	11	4	42
Pneumonia (all forms) .....		.....	.....	.....	.....	.....	4	4	3	14	25
Diarrhoea .....		.....	.....	.....	.....	.....	1	10	9	5	25
Enteritis .....		.....	.....	.....	.....	.....	4	9	4	7	24
Gastritis .....		.....	.....	1	.....	1	3	2	1	.....	7
Syphilis.....		.....	1	.....	.....	1	3	2	1	.....	7
Rickets .....		.....	.....	.....	.....	.....	.....	.....	.....	1	1
Suffocation, overlying.....		.....	.....	.....	.....	.....	1	2	.....	.....	3
Injury at Birth		3	.....	.....	.....	3	.....	.....	.....	.....	3
Atelectasis		1	.....	.....	.....	1	.....	.....	.....	.....	1
Congenital Malformations.....		4	.....	.....	.....	4	.....	1	1	.....	6
Premature birth		36	4	4	1	45	1	.....	.....	.....	46
Atrophy, Debility and Marasmus		11	3	5	1	20	8	7	4	1	40
Other Causes .....		.....	.....	1	.....	1	1	2	1	2	7
Totals		60	13	13	4	90	38	58	42	43	271

Nett Births in { Legitimate...1744. Nett Deaths { Legitimate Infants ...257.
the year { Illegitimate 82. in the year of { Illegitimate Infants. . 14.

TABDE IV. (B.)
SUNDERLAND WEST SUB-DISTRICT.
INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSES OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under 1 Year.
All causes { Certified	65	4	16	6	91	32	34	25	28	210
{ Uncertified	2	.....	.....	.....	2	.....	1	1	2	6
Smallpox										
Chickenpox										
Measles				1	1		1	3		5
Scarlet Fever										
Whooping Cough							1		1	2
Diphtheria and Croup									2	2
Erysipelas										
Tuberculous Meningitis							1			1
Abdominal Tuberculosis										
Other Tuberculous Diseases										
Meningitis (<i>not Tuberculous</i>)										
Convulsions	3				3					3
Laryngitis										
Bronchitis		1	1		2	6	5	5	4	22
Pneumonia (all forms)				1	1	2	3	9	10	25
Diarrhoea			1		1	4	7	1	1	14
Enteritis			1		1	4	6	3	4	18
Gastritis			1		1	2	1		1	5
Syphilis						2	1			3
Rickets									1	1
Suffocation, overlying	2		1		3					3
Injury at Birth	2				2					2
Atelectasis	5				5					5
Congenital Malformations	2		2		4					4
Premature Birth	38	1	4	2	45	2				47
Atrophy, Debility and Marasmus	14	2	5		21	9	6	4	6	46
Other Causes	1			2	3	1	3	1		8
Totals	67	4	16	6	93	32	35	26	30	216

Nett Births in { Legitimate...1831. Nett Deaths in { Legitimate Infants... 205.
the year { Illegitimate.. 49. the year of { Illegitimate „ 11.

TABLE IV. (C.)
SUNDERLAND NORTH SUB-DISTRICT.
INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

Causes of Death.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under 1 year.
All causes {	Certified	32	6	8	5	51	27	30	23	23	154
	Uncertified	2				2			1	2	5
Smallpox											
Chickenpox											
Measles							1			2	3
Scarlet Fever											
Whooping Cough							1		1		2
Diphtheria and Croup											
Erysipelas											
Tuberculous Meningitis.....									1	1	2
Abdominal Tuberculosis								1	1	1	3
Other Tuberculous Diseases.....											
Meningitis (not Tuberculous) ..							1	2	3	1	7
Convulsions		1			1	2	1	3		3	9
Laryngitis											
Bronchitis				1	1	2	6	2	1	1	12
Pneumonia (all forms) ..		1		1		2		4	4	5	15
Diarrhoea								2	2	4	8
Enteritis							7	9	6	4	26
Gastritis								2			2
Syphilis.....								1			1
Rickets											
Suffocation, Overlying											
Injury at Birth		1				1					1
Atelectasis				1		1					1
Congenital Malformations.....			1			1		1			2
Premature Birth.....		19	1	2		22	1				23
Atrophy, Debility and Marasmus		12	3	3	2	20	7	3	2	1	33
Other Causes			1		1	2	2		3	2	9
Totals		34	6	8	5	53	27	30	24	25	159

Nett Births in { Legitimate...1058 Nett Deaths in { Legitimate Infants ...149.
the year { Illegitimate.. 28 the year of { Illegitimate Infants. . 10.

TABLE V.

SHOWING DEATHS FROM ALL CAUSES DURING THE YEAR 1913.

CAUSES OF DEATH.	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and upwards	Total.
Smallpox { Vaccinated														
{ Unvaccinated														
{ No statement														
Measles	12	35	26	6										79
Scarlet Fever		1	8	9		1								19
Typhus Fever														
Epidemic Influenza								2	2	1				5
Whooping Cough	11	1	6	1										19
Diphtheria, Membranous Croup	2	1	9	10										22
Enteric Fever				1		1	1							3
Asiatic Cholera														
Diarrhœa, Dysentery	47	24	4	2			1			1				79
Epidemic or Zymotic Enteritis	64	27												91
Gastro-Enteritis	7	6	1	1			1			1				17
Chickenpox				1										1
Hydrophobia														
Glanders, Farcy														
Tetanus				1										1
Anthrax, Splenic Fever														
Cowpox, Accidents of Vaccination														
Syphilis	11					1		2	1					15
Gonorrhœa														
Phagedœna														
Erysipelas										1				1
Puerperal Fever					1		1							2
Pyæmia, Septicæmia	1			2	1	4	1			1				10
Infective Endocarditis					1									1
Other Allied Diseases														
Malarial Fever														
Rheumatic Fever				1	1			1	1					4
Rheumatism of the Heart							1	1						2
Tuberculosis of Brain or Meninges, Acute Hydrocephalus	5	6	4	11	2	1		1						30
Tuberculosis of Larynx									1					1
Tuberculosis of Lungs	2	3	1	19	27	48	32	29	9	3				173
Tuberculosis of Intestines, Tabes Mesenterica	3	8	8	4		2		1		1				27
General Tuberculosis, Tubercular Disease of Undefined Position		2	1	4	1	1	3							12
Other forms of Tuberculosis, Scrofula	3	1	1	2			2		1		1			11
Other Infective Diseases														
Thrush														
Actinomycosis														
Hydatid Diseases														
Scurvy				1										1
Other Diseases due to altered Food														
Acute Alcoholism, Delirium Tremens														
Chronic Alcoholism										1				1
Chronic Industrial Poisoning														
Other Chronic Poisoning														
Osteo-arthritis, Rheumatoid Arthritis								1	1	1				3
Gout														
Cancer						8	16	36	53	34	10	2		159
Diabetes Mellitus				1	1	2	1	3	6	3				17
Purpura Hæmorrhagica														
Hæmophilia					2									2
Anæmia, Leucocythæmia				1	1	1	1	1	3					8
Lymphadenoma, Hodgkin's Disease								1		1				2

TABLE V.—CONTINUED.

CAUSES OF DEATH.	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and upwards.	Totals.
Premature Birth	116													116
Injury at Birth	6													6
Debility at Birth	63													63
Atelectasis	7													7
Congenital Defects	12													12
Want of Breast Milk														
Atrophy, Debility, Marasmus	56	11	4	1										72
Dentition	3	4												7
Rickets	2	3	3											8
Old Age, Senile Decay									9	59	100	30	2	200
Convulsions	21	3	2											26
Meningitis	14	5	9	7		3	2							40
Encephalitis				2		1								3
Apoplexy			1	1		2	3	21	34	55	18	1		136
Softening of Brain									2	1		1		4
Hemiplegia, Brain Paralysis								1		5				6
General Paralysis of the Insane						4	3	2	1	2				12
Other Forms of Insanity					1	1		1	1	1				5
Chorea														
Cerebral Tumour						1	1							2
Epilepsy					4	3	2	1						10
Laryngismus Stridulus														
Locomotor Ataxy								1	2					3
Paraplegia, Diseases of Spinal Cord		1							1	2	1			5
Other and Ill-defined Diseases of Brain or Nervous System	1					1	2	3	3	7				17
Otitis, Otorrhœa		1	1			1								3
Diseases of Nose, Epistaxis														
Diseases of Eye, Ophthalmia														
Endocarditis, Valvular Diseases of the Heart				6	4	4	7	17	23	14	12			87
Pericarditis						1								1
Hypertrophy of Heart														
Angina Pectoris									1		1			2
Aneurism							3	2		3				8
Senile Gangrene										1				1
Embolism, Thrombosis									1	2				3
Phlebitis														
Varicose Veins														
Other and Ill-defined Diseases of Heart and Circulatory System	1	1	1	2	5	3	8	39	38	36	15	3		152
Laryngitis	1								1					2
Croup														
Other Diseases of of Larynx and Trachea														
Acute Bronchitis	76	24	11	4	2	1	4	15	27	41	22	3		230
Chronic Bronchitis			1			1	7	3	10	14	7			43
Lobar Croupous Pneumonia	1	2	2	3	3	7	5	7	8	5	2			45
Lobular Broncho-Pneumonia	54	30	20	5			1	1	1	2	4			118
Pneumonia, form not stated	10	11	7	5	12	5	9	16	14	12	2			103
Emphysema, Asthma							2	2	1					5
Pleurisy						2	1	2	2	3				10
Other and Ill-defined Diseases of the Respiratory System									1	1	1			3
Diseases of Mouth and Annexa	3	1												4
Diseases of Pharynx	1			2			1			1				5
Diseases (Esophagus														
Ulcer of Stomach and Duodenum					2	1	1	3	4					11
Other Diseases of Stomach	14	5	2		1	3	1	2	2					30
Enteritis			5	2			1	1	1		1			11
Appendicitis				3	2	2	2	1						10
Obstruction of Intestine	1					2		6	4	1				14
Other Diseases of Intestine								1						1
Cirrhosis of Liver						1	4	7	5	3	1			21
Other Diseases of Liver						1		1	1	2				5
Peritonitis				1	1	1	2		1	1				7
Other and Ill-defined Diseases of Digestive System								2						2

TABLE V.—CONTINUED.

CAUSES OF DEATH.	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and upwards.	Total
Diseases of Lymphatic System and Ductless Glands														
Addison's Diseases						1								
Acute Nephritis	1	3	2	2		1	4	6	6	1	2			27
Bright's Disease		1	1	1	2	5	6	7	16	15	3			53
Calculus								1						1
Diseases of Bladder and Prostate							1	1	1	1	2			6
Other and Ill-defined Diseases of Urinary System	1					1	1		3		1			7
Diseases of Testis and Penis														
Diseases of Ovaries						2				1	1			4
Diseases of Uterus and Appendages							1							1
Diseases of Vagina and External Genital Organs														
Diseases of Breast														
Abortion, Miscarriage					1	1	2							4
Puerperal Mania														
Puerperal Convulsions						3	1	1						5
Placenta Prævia, Flooding						1								1
Puerperal Thrombosis														
Other and Ill-defined Accidents and Diseases of Pregnancy and Child Birth					5	5	2							12
Arthritis, Ostitis, Periostitis										2	1			3
Other and Ill-defined Diseases of Osseous System				2		1								3
Ulcer, Bed sore														
Eczema										1				1
Pemphigus	1													1
Other and Ill-defined Diseases of Integumentary System	1							1	1	1				4
Accident or Negligence—														
In Mines and Quarries.					2	2								4
In Vehicular Traffic			1	3	1			1	1					7
On Railways				1	1	1	3	1						7
On Ships, Boats and Docks (excluding Drowning)						3		3						6
In Building Operations														
By Machinery							1							1
By Weapons and Implements														
Burns and Scalds		6	8	1										15
Poisons, Poisonous Vapours			1		1									2
Surgical Narcosis														
Effects of Electric Shock														
Corrosion by Chemicals														
Drowning	1			1	3	1	2		1					9
Suffocation, Overlaid in Bed	6													6
Suffocation, otherwise	4			1			1		2	2				10
Falls, not specified		2		1	1	1	4	1	1	2				13
Weather Agencies														
Otherwise, and not stated				1		2	1	1	3	1				9
Found Drowned					1	1	2		1		1			6
Homicide								1						1
Suicides—														
By Poison						2		1	2					5
By Asphyxia								1	1					2
By Hanging and Strangulation					1	2	2	3	1					9
By Drowning														
By Shooting														
By Cut or Stab								1						1
By Precipitation from Elevated Places														
By Crushing														
By Other and Unspecified Methods														
Execution														
Sudden Death (Cause not Ascertained)														
Other Ill-defined and not Specified Causes										2				2
TOTAL	646	229	151	136	94	158	167	268	317	352	209	40	2	2769

TABLE V_A.

SHOWING THE DEATHS FROM ALL CAUSES REGISTERED IN
EACH DISTRICT, 1913.

CAUSES OF DEATH.	Sunderland East.				Sunderland West.				Sunderland North.				Totals
	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	
Smallpox { Vaccinated
Unvaccinated
No Statement
Measles	4	20	3	27	5	26	3	34	3	15	..	18	79
Scarlet Fever	6	3	9	..	3	4	7	..	..	3	3	19
Typhus Fever
Epidemic Influenza	2	2	..	..	3	3	..	..	..	..	5
Whooping Cough	7	5	..	12	2	2	1	5	2	..	..	2	19
Diphtheria, Membranous Croup	2	1	3	2	4	5	11	..	4	4	8	22
Enteric Fever	2	2	..	..	1	1	..	..	..	..	3
Asiatic Cholera
Diarrhoea, Dysentery	25	12	2	39	14	5	1	20	8	11	1	20	79
Epidemic or Zymotic Enteritis	22	8	..	30	18	10	..	28	24	9	..	33	91
Gastro-Enteritis	2	6	..	8	3	..	..	3	2	1	3	6	17
Chickenpox	1	1	..	..	..	..	..	..	..	..	1
Hydrophobia
Glanders, Farcy
Tetanus	1	1	..	..	..	..	1
Anthrax, Splenic Fever
Cowpox, Accidents of Vaccination
Syphilis	7	..	3	10	3	..	1	4	1	..	..	1	15
Gonorrhœa
Phagedœna
Erysipelas	1	1	..	..	..	..	1
Puerperal Fever	2	2	..	..	..	..	2
Pyæmia, Septicæmia	1	..	3	4	..	..	3	3	..	..	3	3	10
Infective Endocarditis	1	1	..	..	..	..	..	..	..	..	1
Other Allied diseases
Malarial Fever
Rheumatic Fever	1	1	..	..	1	1	..	..	2	2	4
Rheumatism of the Heart	2	2	..	..	..	..	..	..	..	..	2
Tuberculosis of Brain or Meninges, Acute Hydrocephalus	2	1	4	7	1	7	5	13	2	2	6	10	30
Tuberculosis of Larynx	1	1	..	..	..	..	1
Tuberculosis of Lungs	2	2	70	74	..	1	65	66	..	1	32	33	173
Tuberculosis of Intestines, Tabes Mesenterica	3	1	4	..	6	4	10	3	7	3	13	27
General Tuberculosis, Tubercular Disease of Undefined Position	3	3	..	2	3	5	..	1	3	4	12
Other Forms of Tuberculosis, Scrofula	3	..	2	5	..	2	3	5	..	..	1	1	11
Other Infective Diseases..
Thrush
Actinomycosis
Hydatid Diseases
Scurvy	1	1	1
Other Diseases due to Altered Food
Acute Alcoholism, Delirium Tremens
Chronic Alcoholism	1	1	..	..	..	..	1
Chronic Industrial Poisoning
Other Chronic Poisonings
Osteo-arthritis, Rheumatoid Arthritis..	1	1	..	..	1	1	..	..	1	1	3
Gout
Cancer	46	46	..	..	75	75	..	..	38	38	159
Diabetes Mellitus	3	3	..	..	9	9	..	..	5	5	17
Purpura Hæmorrhagica
Hæmophilia	1	1	..	..	1	1	..	..	..	..	2
Anæmia, Leucocythæmia	5	5	..	..	3	3	..	..	..	..	8
Lymphadenoma, Hodgkin's Disease	1	1	..	..	..	..	..	..	1	1	2

TABLE VA.—CONTINUED.

CAUSES OF DEATH.	Sunderland East.				Sunderland West.				Sunderland North.				TOTAL.
	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	
Premature Birth	46	...	...	46	47	...	...	47	23	...	...	23	116
Injury at Birth	3	...	...	3	2	...	...	2	1	...	...	1	6
Debility at Birth	23	...	...	23	24	...	...	24	16	...	...	16	63
Atelectasis	1	...	...	1	5	...	...	5	1	...	...	1	7
Congenital Defects	6	...	...	6	4	...	...	4	2	...	...	2	12
Want of Breast Milk .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy, Debility, Marasmus	17	7	...	24	22	5	1	28	17	3	...	20	72
Dentition	1	1	...	2	...	...	...	...	2	3	...	5	7
Rickets	1	2	...	3	1	1	...	2	...	3	...	3	8
Old Age, Senile Decay .. .. .	...	...	89	89	...	...	78	78	...	...	33	33	200
Convulsions	9	2	...	11	3	2	...	5	9	1	...	10	26
Meningitis	7	6	6	19	...	3	3	6	7	5	3	15	40
Encephalitis .. .. .	...	...	2	2	...	...	1	1	...	...	...	...	3
Apoplexy .. .. .	...	...	48	48	...	...	61	61	...	1	26	27	136
Softening of Brain .. .. .	...	...	3	3	...	...	1	1	...	...	...	...	4
Hemiplegia, Brain Paralysis .. .. .	...	...	4	4	...	...	2	2	...	...	...	...	6
General Paralysis of the Insane .. .. .	...	...	5	5	...	...	4	4	...	...	3	3	12
Other Forms of Insanity .. .. .	...	...	1	1	...	...	4	4	...	...	...	...	5
Chorea .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebral Tumour .. .. .	...	...	...	...	...	...	...	...	...	...	2	2	2
Epilepsy .. .. .	...	...	4	4	...	...	3	3	...	...	3	3	10
Laryngismus Stridulus .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Locomotor Ataxy .. .. .	...	...	1	1	...	...	1	1	...	...	1	1	3
Paraplegia, Diseases of Spinal Cord .. .. .	...	1	...	1	...	...	2	2	...	...	2	2	5
Other and Ill-defined Diseases of Brain or Nervous System	1	...	7	8	...	...	7	7	...	...	2	2	17
Otitis, Otorrhœa .. .. .	...	...	...	...	...	2	...	2	...	...	1	1	3
Diseases of Nose, Epistaxis .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Eye, Ophthalmia .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Endocarditis, Valvular Diseases of the Heart .. .. .	...	...	23	23	...	...	46	46	...	1	17	18	87
Pericarditis .. .. .	...	...	...	...	...	...	1	1	...	...	...	...	1
Hypertrophy of Heart .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Angina Pectoris .. .. .	...	...	...	...	...	...	2	2	...	...	...	...	2
Aneurism .. .. .	...	...	5	5	...	...	3	3	...	...	...	...	8
Senile Gangrene .. .. .	...	...	...	...	...	...	1	1	...	...	...	...	1
Embolism, Thrombosis .. .. .	...	...	1	1	...	...	1	1	...	...	1	1	3
Phlebitis .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Varicose Veins .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Other and Ill-defined Diseases of Heart and Circulatory System .. .. .	...	...	48	48	1	1	68	70	...	1	33	34	152
Laryngitis	1	...	...	1	...	...	1	1	...	...	...	...	2
Croup .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Larynx and Trachea .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Bronchitis	42	18	55	115	22	11	42	75	12	6	22	40	230
Chronic Bronchitis .. .. .	...	1	22	23	...	...	12	12	...	...	8	8	43
Lobar Croupous Pneumonia .. .. .	...	...	10	10	...	3	21	24	1	1	9	11	45
Lobular Broncho-Pneumonia	21	19	5	45	21	22	4	47	12	9	5	26	118
Pneumonia, form not stated	4	8	43	55	4	9	25	38	2	1	7	10	103
Emphysema, Asthma .. .. .	...	...	...	...	...	...	4	4	...	...	1	1	5
Pleurisy .. .. .	...	...	4	4	...	...	2	2	...	...	4	4	10
Other and Ill-defined Diseases of the Respiratory System .. .. .	...	...	...	...	...	...	1	1	...	...	2	2	3
Diseases of Mouth and Annæa .. .. .	...	1	...	1	1	...	...	1	2	...	...	2	4
Diseases of Pharynx	1	...	2	3	...	...	2	2	...	...	...	...	5
Diseases of Oesophagus .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulcer of Stomach and Duodenum .. .. .	...	...	5	5	...	...	3	3	...	...	3	3	11
Other Diseases of Stomach	7	3	7	17	5	4	2	11	2	...	...	2	30
Enteritis .. .. .	...	1	...	1	...	3	5	8	...	...	2	2	11
Appendicitis .. .. .	...	...	1	1	...	...	5	5	...	...	4	4	10
Obstruction of Intestine .. .. .	...	...	8	8	...	...	4	4	1	...	1	2	14
Other Diseases of Intestine .. .. .	...	...	...	...	...	...	1	1	...	...	...	...	1
Cirrhosis of Liver .. .. .	...	...	10	10	...	...	9	9	...	...	2	2	21
Other Diseases of Liver .. .. .	...	...	2	2	...	...	1	1	...	...	2	2	5
Peritonitis .. .. .	...	...	1	1	...	...	5	5	...	...	1	1	7
Other and Ill-defined Diseases of Digestive System .. .. .	...	...	...	...	...	...	2	2	...	...	...	...	2

TABLE VA.—CONTINUED.

CAUSE OF DEATH.	Sunderland East.				Sunderland West.				Sunderland North.				TOTAL.
	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	
Diseases of Lymphatic System and Ductless Glands													
Addison's Disease							1	1					1
Acute Nephritis		1	7	8		1	7	8	1	3	8	12	28
Bright's Disease			23	23		2	16	18			16	16	57
Calculus			1	1									1
Diseases of Bladder and Prostate			4	4			2	2					6
Other and Ill-defined Diseases of Urinary System			3	3			1	1	1		2	3	7
Diseases of Testis and Penis													
Diseases of Ovaries							3	3			1	1	4
Diseases of Uterus and Appendages											1	1	1
Diseases of Vagina and External Genital Organs													
Diseases of Breast													
Abortion, Miscarriage			1	1			1	1			2	2	4
Puerperal Mania													
Puerperal Convulsions			3	3			2	2					5
Placenta Prævia, Flooding											1	1	1
Puerperal Thrombosis													
Other and Ill-defined Accidents and Diseases of Pregnancy and Child Birth			5	5			2	2			5	5	12
Arthritis, Ostitis, Periostitis			2	2			1	1					3
Other Ill-defined Diseases of the Osseous System			1	1							2	2	3
Ulcer, Bed sore													
Eczema							1	1					1
Pemphigus					1			1					1
Other and Ill-defined Diseases of Integumentary System	1		1	2			2	2					4
Accident or Negligence—													
In Mines and Quarries			1	1							3	3	4
In Vehicular Traffic			3	3		1	1	2			2	2	7
On Railways			4	4			3	3					7
On Ships, Boats and Docks (excluding Drowning)			3	3			2	2			1	1	6
In Building Operations													
By Machinery							1	1					1
By Weapons and Implements													
Burns and Scalds		9	1	10		4		4		1		1	15
Poisons, Poisonous Vapours							1	1		1		1	2
Surgical Narcosis													
Effects of Electric Shock													
Corrosion by Chemicals													
Drowning			4	4	1		3	4			1	1	9
Suffocation, Overlaid in Bed	3			3	3			3					6
Suffocation, otherwise	1		3	4	1		3	4	2			2	10
Falls, not specified		1	4	5			4	4		1	3	4	13
Weather Agencies													
Otherwise, and not stated			6	6			2	2			1	1	9
Found Drowned			4	4			2	2					6
Homicide			1	1									1
Suicides—													
By Poison			2	2			2	2			1	1	5
By Asphyxia			1	1			1	1					2
By Hanging and Strangulation			7	7			1	1			1	1	9
By Drowning													
By Shooting													
By Cut or Stab											1	1	1
By Precipitation from Elevated Places													
By Crushing													
By other and Unspecified Methods													
Execution													
Sudden Death (Cause not Ascertained)													
Other Ill-defined and not specified causes.			1	1			1	1					2
TOTAL	271	146	679	1096	216	142	705	1063	159	92	359	610	2769

TABLE VI.

Showing the STATE OF VACCINATION in the entire Districts of the Sunderland Union for the Year ending December, 1912, and for the Ten preceding Years.

(AS FURNISHED BY THE VACCINATION OFFICERS).

Year.	Births Registered.	Total Vaccinated.		Postponed by Medical Authority.	Died previous to Vaccination.	Removal to places unknown or other Unions.	Certificates of (Conscientious Objection) Exemption.
		Succ.	Insusceptible.				
1902	6700	5008	30	160	747	715	40
1903	6743	5508	22	102	802	267	42
1904	6737	5551	28	93	834	189	32
1905	6784	5725	26	82	730	163	53
1906	6996	5831	97	97	767	195	66
1907	6913	5613	35	94	709	287	175
1908	6793	5339	39	104	680	239	372
1909	6171	4702	32	107	612	208	510
1910	6001	4505	17	94	595	183	606
1911	5924	4078	30	212	642	223	688
Average for 10 years, 1902-11.	6576	5186	36	114	712	267	258
1912	6182	4363	34	129	562	277	817

ANNUAL REPORT

OF THE

Chief Sanitary Inspector.

HEALTH OFFICE,

TOWN HALL,

SUNDERLAND.

TO THE CHAIRMAN, VICE-CHAIRMAN, AND MEMBERS OF THE HEALTH
COMMITTEE.

GENTLEMEN,

I have the honour of submitting to you my Nineteenth Annual Report of the work performed by the Inspectorial staff of the Health Department for the year ending December 31st, 1913.

In detailing the work of the Department it is difficult to convey by tables and figures anything like an adequate impression of the sanitary improvements accomplished, yet the information given in the various tables will to some extent show the nature and variety of the work accomplished.

The number of inspections made during the year by the District Inspectors was 55,302, Workshops Inspector 7,754, Foods Inspector 13,461, a total of 76,517. There were 793 appointments and advisory visits by the Inspectors with owners, agents, or trades-people, advising as to official requirements respecting sanitary matters, viz., alterations, renewals and repairs, and the number of inspections and re-inspections of premises during the progress of work was 8,178. The nuisances dealt with under the various Public Health Acts, Local Acts and Bye-laws, etc., necessitated the serving of 10,512 notices. Of those 1,838 were statutory notices and 8,674 preliminary notices. There was also a number of nuisances abated and other sanitary work undertaken on the advice of or the verbal instructions of the District Inspectors.

DRAIN TESTING.

The number of tests applied to drains was 1,941, of these 1,713 were water and 228 smoke or chemicals. The number of tests made on the application of prospective occupiers or purchasers, or on the suspicion of nuisances was 171, and in 60 cases defects were found. In accordance with our usual practice all house drains where cases of Enteric Fever or Diphtheria are notified are tested, and last year 97 tests were so made and 14 found to be more or less defective (Table 5).

There were 287 complaints received at the office, as compared with 288 in 1912. (Table 8.)

ALTERATIONS AND IMPROVEMENTS.

It will be noted that the abolition of insanitary privies and ashpits is being steadily proceeded with, 867 privies and ashpits having been replaced by washdown water-closets and approved ashbins. 323 broken or otherwise defective w.c. basins were replaced with new washdown pedestal basins.

The drains of 448 premises were either relaid or repaired. (Table 4.)

INFECTIOUS DISEASES.

It is with satisfaction that no case of smallpox was reported during the year. Also the cases of Enteric Fever notified were less than in the previous year. The increased notifications of Scarlet Fever, 779 cases as against 228 in 1912, necessitated considerably more visiting by the District Inspectors for the purpose of enquiring as to the cause or origin of the disease, and to leave printed instructions where the cases were treated at home, the number of visits made being 1,489. (Table 1.)

The work performed by the Disinfectors is given in Table 24.

HOUSING, TOWN PLANNING, ETC., ACT.

There were 79 notices outstanding at the end of 1912; of these 58 have been complied with, the houses having been altered and repaired rendering them fit for habitation. 12 houses have been voluntarily demolished, and 9 Demolition Orders have been made.

The Corporation has demolished two houses, the owners having failed to comply with Demolition Orders made in 1911.

During the year 1913, 121 houses have been reported and Closing Orders made against them. Forty-six have been altered, repaired and made fit for habitation and the Closing Orders withdrawn, and 21 are

in course of repair, etc. In two cases the owners have voluntarily demolished the houses.

A list of the properties dealt with, giving a brief summary of the principal items of work carried out, are given in Table 28.

House-to-house inspections have been carried out by Inspectors as work would permit, 1,018 tenements, comprising 1,854 rooms, having been inspected and records kept for future use.

COMMON LODGING HOUSES.

These houses have been regularly inspected, and found to be fairly well conducted, no breach of bye-laws having been observed.

Two houses have been closed, one being pulled down to make improvements for adjoining premises; the other house was considered to be unsuitable, and the Corporation refused to re-register. (Table 6.)

FOOD AND PROVISION INSPECTION.

The Slaughter-houses, Butchers, Fish and Fruit Shops have been systematically inspected. (See Table 11.)

Although a large quantity of different kinds of food was condemned and destroyed, it is pleasing to note that in all cases the food was surrendered by the owners without having to obtain any legal order for its destruction.

The Cowsheds, Dairies, and Milkshops have been frequently and carefully inspected, the number of inspections made was 1,728. (See Table 13.)

The premises whereon offensive trades are being carried on number 165, including 114 fried fish shops. These premises are regularly visited and every effort is made to see that the business is so conducted as to prevent or mitigate, as far as is practicable, any nuisance arising from such business.

Sixty-two notices were served in respect to fried fish shops, requiring the provision of suitable stoves and covers to prevent a nuisance from the steam and vapour given off during the process of frying. Fifty-four of these have been complied with, five have discontinued, and three are under consideration. It was found necessary to serve one notice each in respect of slaughter-houses—to repair yard, to remove fish offal, to remove manure.

Three notices were served to abate nuisances arising from the slaughtering of fowls (according to the Hebrew custom) in yards of dwelling-houses. These were complied with, suitable buildings, pens, etc., having been obtained where the business can be carried on without causing a nuisance.

WORKSHOPS AND SHOPS INSPECTION.

The inspections made by the Workshops, etc., Inspector are given in Table 15, and the notices, etc., in Table 16.

OUTWORKERS.

138 blank forms were despatched to firms employing outworkers, requesting them to fill in the same and return to this office.

In compliance with Section 107 of the Factory and Workshop Act, 1901, 22 outworkers employed outside the Borough were reported to other Authorities, and 72 reports relating to non-display of Abstract of Factory Act, and other matters were sent to H.M. Inspector of Factories. (See Table 16.)

RAG FLOCK ACT, 1911.

Samples of rag flock have been taken resulting in one prosecution, the case being dismissed on payment of costs amounting to £1 15s. 4d.

SHOPS ACTS, 1912 AND 1913.

Under the above Acts no fewer than 907 irregularities have been discovered during the year. In 168 cases it was necessary to circularise the persons responsible for the defaults with a view to taking further proceedings in order to enforce compliance with the provisions infringed. (See Tables 16 and 22.)

Two prosecutions were ordered by the Committee, resulting in one fine of 20/- and costs, and one of 5/- and costs being imposed. (See Table 27.)

It will be seen on reference to Table 15 that out of 7,754 inspections made by the Inspector 5,173 were made under the Shops Acts. 23 shops have been added and 41 withdrawn from the register, leaving a total of 3,085. (See Table 17.)

ANALYSIS OF FOOD AND DRUGS.

The number of samples purchased and submitted to the Public Analyst were 338, 156 being formal samples and 182 informal. Of these 126 formal and 161 informal were certified to be genuine. (For particulars see Tables 25 and 26.)

MILK AND CREAM REGULATIONS.

Three samples of cream were purchased and submitted to the Public Analyst, who certified them to be genuine and to comply with the requirements of the Regulations.

There was also purchased 91 samples of milk for Bacteriological examination, and 185 samples of water were submitted for a like purpose. The result of these is given in the Medical Officer's report.

It was found necessary to report to the Health Committee 166 persons who had failed to comply with notices served upon them for the abatement of nuisances, and the Committee gave authority to institute proceedings against them. These persons were then informed of this by letter, with the result that it was found necessary to take out 10 summonses only. (For result of magisterial proceedings, see Table 27.)

The clerical work of the office, viz., the keeping and compiling of records and statistics, the ever increasing demands for returns, etc., from various Government departments, is constantly increasing the work in the department. In addition to the work enumerated in the various tables, 613 letters and 728 circular letters with respect to various matters in connection with the department were sent out, and in addition to the above the following institutions, laundries, etc., were notified of infectious diseases in dwelling houses, viz.:—

To the Royal Infirmary	104
„ Eye Infirmary	52
„ Monkwearmouth Hospital	52
„ Public Libraries	208
„ Private Lending Libraries	312
„ Laundries	1,062
„ Day Schools	1,330
„ Sunday Schools	628

In conclusion I beg to tender my grateful thanks to the Chairman and Members of the Committee for their uniform kindness and consideration, and to acknowledge the loyal and hearty co-operation with which Mr. Watson, my Deputy, and every member of the staff has assisted me. It is only by such co-operation and mutual assistance that the responsible and ever increasing demands on the Department by legislative and other enactments respecting public health can be successfully dealt with.

I am, Gentlemen,

Your obedient Servant,

JOHN PENNOCK,

Chief Sanitary Inspector.

July, 1914.

TABLE 1.

Showing Visits made by District Inspectors.

INSPECTIONS.	No. 1 District.	No. 1A District.	No. 2 District.	No. 3 District.	No. 4 District.	No. 5 District.	No. 6 District.	Totals.
FACTORY AND WORKSHOP ACTS :—								
Factories .....	..	..	..	6	..	..	1	7
Workshops .....	..	..	..	1	1	..	..	2
Bakehouses .....	..	..	..	..	2	..	..	2
Laundries ..	..	..	..	..	6	..	..	6
WORKPLACES :—								
Stables, etc.	68	21	1	61	83	87	52	373
Other .....	..	..	..	..	1	..	..	1
DAIRIES, &c.								
Cowsheds .....	..	..	..	..	..	..	1	1
Dairies and Milk Stores.....	..	..	..	..	2	..	..	2
SAMPLES :—								
Sale of Food and Drugs	18	..	18	55	43	67	18	224
Bacteriological	40	..	41	50	45	52	48	276
PROVISIONS :—								
Fruit and Provision Stores .....	..	..	..	..	..	..	11	11
Fish Shops .....	..	..	..	1	..	..	..	1
Butcher Shops.....	..	..	..	..	25	..	11	36
Slaughter Houses .....	..	..	..	..	21	..	..	21
INSPECTIONS :—								
Dwelling Houses.....	915	28	1080	3271	1058	2503	335	9190
Business Premises	47	49	2	20	..	..	15	133
Tenemented Houses	1914	1290	2023	..	2480	2506	3367	13580
" Rooms.....	4170	..	4530	..	1014	2212	324	12250
Infectious Diseases	316	9	89	113	204	187	89	1007
" " "Contacts"...	57	6	..	19	49	339	12	482
Common Lodging Houses	38	48	144	..	..	..	..	230
Work in progress..	336	365	805	2618	2190	732	1132	8178
Appointment and Advice re work.	32	84	186	68	237	103	83	793
Information (Ownerships, &c.) ...	515	332	813	466	702	395	1078	4301
Smoke Observations .....	..	..	..	7	..	..	..	7
School and other conveniences ...	..	..	..	..	334	50	..	384
OFFENSIVE TRADES :—								
Marine Stores .....	..	..	..	..	5	..	..	5
Fried Fish and Fish Curing .....	..	..	..	..	..	..	4	4
Hide and Skin Warehouses .....	..	..	..	..	3	..	..	3
HOUSING OF WORKING CLASSES AND TOWN PLANNING ACTS :—								
Number of Tenements Inspected and re-inspected	517	126	75	2	23	228	47	1018
Number of Rooms Inspected and re-inspected	1053	146	196	11	44	316	88	1854
Number Inspections re work.....	257	67	39	..	15	72	207	657
Shops Act Visits	112	..	..	..	..	..	..	112
Other Inspections .....	..	..	151	..	..	..	..	151
Total Inspections.....	10405	2571	10193	6769	8592	9849	6923	55302

TABLE 2.

SUMMARY OF NOTICES SERVED for the Abatement
of Nuisances.

Nature of Notice,	Preliminary.		Statutory.		TOTALS.
	Owner.	Occupier.	Owner.	Occupier.	
To cleanse and Disinfect Premises after Infectious Disease		863	...	89	952
„ Abate Nuisance arising from :—					
Drains... ..	290	5	167	18	480
Water Closets	284	16	124	5	429
Privies and Ash-pits	376	...	135	...	511
Yard Pavements	122	4	62	...	188
Dilapidated Houses	345	...	123	...	468
Defective Spouts, &c.	315	...	97	...	412
Animals and Fowls	33	2	1	1	37
Overcrowding.....	44	36	16	7	103
Dirty Dwelling Rooms .....	...	27	...	22	49
Manure and Refuse	26	1	13	...	40
Other Nuisances	187	...	14	...	201
Provide Domestic Water Supply...	33	...	3	...	36
To Lime Wash Dwelling Houses...	2035	2659	...	...	4694
„ Common Lodging Houses ...	...	3	...	...	3
„ Staircases and Passages	114	166	11	...	291
„ Yards and Conveniences	114	574	...	...	688
Under H.W.C. and Town Planning					
Acts. &c... ..	...	...	222	77	299
„ Provisional Order .....	...	...	489	...	489
„ P.H.A. Section 36 .....	...	...	142	...	142
TOTALS.....	4318	4356	1619	219	10512

TABLE 3.

Showing Notices Served in each District.

Notices Served.	No. 1.	No. 1A.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	Totals.
To Cleanse and Disinfect Premises after Infectious Disease	304	...	89	113	179	177	90	952
To abate Nuisance arising from —								
Drains.....	127	67	55	31	52	74	74	480
Water Closets	88	52	45	35	58	42	109	429
Privies and Ash-pits	22	16	6	182	48	87	150	511
Yard Pavements	33	3	32	15	27	24	54	188
Dilapidated Houses	81	33	90	7	65	180	12	468
Defective Spouts, &c.	52	32	77	16	53	122	60	412
Animals and Fowls .....	...	..	1	...	3	...	33	37
Overcrowding.....	35	14	38	...	4	10	2	103
Dirty Dwelling Rooms, &c.....	2	...	8	...	29	7	3	49
Manure and Refuse	16	7	8	...	2	2	5	40
Other Nuisances	126	...	55	3	...	8	9	201
To Provide Domestic Water Supply	3	2	10	2	2	4	13	36
To Lime-wash Dwelling Houses ...	2035	194	519	...	553	1068	325	4694
„ Common Lodging Houses	...	3	...	...	...	...	..	3
„ Staircases and Passages...	40	38	27	...	109	...	77	291
„ Yards and Conveniences..	40	38	...	...	166	...	444	688
Under H., W. C. & Town Planning, etc., Acts	187	...	19	...	13	34	46	299
„ Provisional Order	23	...	61	61	144	131	69	489
„ P.H.A., Section 36... ..	48	...	19	13	16	16	30	142
Totals	3262	499	1159	478	1523	1986	1605	10512

TABLE 4.
WORK DONE.

Waterclosets :—		Animals kept as a Nuisance.. ...	15
Cleansed or Unstopped.....	163	Dwelling Houses :—	
New Basins fixed	323	Repaired Internally	383
Other Repairs.....	94	Roof Repaired	275
W.C. Cisterns :—		Spouts Renewed or Repaired	444
New Cisterns fixed.....	184	Overcrowding Abated	56
Cisterns Repaired	155	Water Supply (domestic pur- poses)	47
Soil or Vent Pipes :—		Ditto, (Waterclosets).....	35
New Pipes fixed—length, feet, 2601		Limewashed or Cleansed :—	
Drains :—		Dwelling Houses	4445
Cleansed or Repaired.....	448	Staircases and Passages.....	879
Lavatory Wastes Repaired ...	86	Yard Walls and Conveniences	1482
„ Reconstructed	85	Yard Pavements :—	
Stoneware Pipes laid (4 in.) ft. 17027		Cleansed.....	70
„ (6 in.) ft. 444		Repaired	62
Heavy Metal Pipes (4 in.) ft. 510		Cemented or Paved	74
Urinals :—		Accumulation of Manure or other Refuse :—	
Cleansed or Repaired	18	Removed	58
New Urinals provided	10	Pit Repaired.....	3
Privies :—		Pit Provided.....	2
Abolished and W.C.'s substi- tuted	867	Samples :—	
Ashpits :—		Food and Drugs	236
Repaired (Brick Structures)...	2	Bacteriological	276
Abolished—Dust Bins pro- vided	854		
Dust Bins. Renewals.....	331		

TABLE 5.
DRAINS TESTED.

	Nature of Test.			Total.	Defective.
	Water.	Chemical.	Smoke.		
On Complaint or Request..	29	1	34	64	18
On Suspicion of Nuisance	30	46	31	107	42
On Account of Infectious Disease	26	58	13	97	14
Work in progress	1450	3	37	1490	53
Retested	178	...	5	183	14
Totals	1713	108	120	1941	141

TABLE 6.
REGISTERED COMMON LODGING HOUSES.

LOCALITY OF HOUSE.	No. of Rooms.	No. of Lodgers.
4 and 5, Bedford Street.....	13	83
3 and 4, Charles Street	11	37
41, 42, and 43, Spring Garden Lane.....	11	35
38, Spring Garden Lane	6	21
6, Maud's Lane	8	37
1, Horn's Lane	8	31
10, Church Street East	8	36
2, Queen Street East... ..	6	47
2, Arras Lane.....	5	42
3 and 4, Queen Street East	6	46
14 and 15, George Street East	17	47
29, High Street East	14	81
5 and 6, High Street East	14	185
170, High Street East	2	5
195½, High Street East.....	2	15
22, Lambton Street	6	25

TABLE 7.
REPORTS FROM INSPECTORS.

District.	To Chief Inspector.	To Cleansing Superin- tendent.	To Borough Surveyor.	To Water Company.
1	12	8	3	...
1a	...	...	4	...
2	9	21	12	11
3	...	...	59	...
4	19	28	6	...
5	3	40	16	...
6	9	17	11	1
Total ...	52	114	111	12

TABLE 8
COMPLAINTS RECEIVED AT THE HEALTH OFFICE,
and attended to during the year 1913.

NATURE OF COMPLAINTS.	Totals.
Roof, Spouts, etc., out of Repair	41
Waterclosets out of Repair.....	39
Overcrowding	21
Drains out of Repair	89
Dampness	8
Offensive Smell.....	12
Pavement out of Repair	3
Dilapidated Houses	15
Animals kept as a Nuisance	13
Accumulations of Rubbish	4
Dirty Houses.....	7
Ashpits Insanitary	4
Miscellaneous	31
Totals	287

Of the total complaints 47 were unfounded.

TABLE 9.

Showing the number of Dwelling Houses in the Borough,
and the Closet accommodation provided therewith, viz:—

Houses with Water-Closets and Movable Ash Receptacles.....		19981	
„ „ „ “ Fixed ” „		260	
„ Slop or Waste Water-Closets.....		39	
		<hr/>	20280
„ Water-Closets and Privies and Open Ashpits.....		25	
„ „ „ Covered „			
	(Ashclosets)	476	
		<hr/>	501
„ Privies and Open Ashpits.....		145	
„ „ Covered „ (Ashclosets).....		3046	
„ Pans		103	
		<hr/>	3294
	Total.....		<hr/> 24075

TABLE 10.

Showing the kind of Conveniences in use at the
FACTORIES, WORKSHOPS and WORKPLACES within the
BOROUGH.

Water Carriage—Ordinary Water-Closets	855
Trough Closets	45
Privies with Covered Ashpits.....	46
„ „ and also Water Closets.....	13
„ Open Ashpits	2
„ Over Manure Pits.....	9
„ „ River on Quay Side.....	7
Pan Closets	3
	<hr/> 980

Seven Water-Closets have been provided at Factories and Seven
for Workshops.

TABLE 11.
INSPECTION OF PROVISIONS.

The following Work has been performed by the Inspector
appointed for this purpose.

VISITS OF INSPECTION	No. of Premises Inspected.
MEAT TRADE—	
Butchers' Shops (retail).....	4973
Slaughter Houses	1592
Game, Poultry, and Rabbit Shops	201
FISH—	
Fish Shops (retail)	50
„ Frying	342
„ Curing	20
„ Hawkers' Barrows or Baskets.....	29
FRUIT TRADE—	
Fruit Shops (retail).....	1836
„ Warehouses	493
„ Hawkers' Barrows or Baskets	758
„ Stalls (Market).....	75
MILK REGULATIONS—	
Cowsheds	120
Milk Shops or Stores	1728
Ice Cream Stores, Shops, or Stalls	476
PROVISIONS.....	
Market Stalls	30
OFFENSIVE TRADES—	
Tripe Preparing	174
Skin Preparing	87
Hide and Skin Warehouses	118
Marine Stores	72
Other Visits (Piggeries, etc.)	287
Total Inspections.....	13461

TABLE 12.
FOOD CONDEMNED AND DESTROYED.

NATURE OF UNSOUND FOOD.	Quantity.
Carcases of Cows (23).....	14,888 lbs.
„ Heifers (13).....	6496 lbs.
„ Bullocks (2).....	1416 lbs.
„ Sheep (1).....	70 lbs.
„ Pigs (9)	1004 lbs.
Viscera of Animals	62
Tripe	160 lbs.
Mussels.....	168 lbs.
Frozen Rabbits	375
Strawberries.....	1176 lbs.
Apples	20 lbs.
Pears	50 lbs.
Vegetables	128 lbs.

TABLE 13.
DAIRIES, COWSHEDS, AND MILKSHOPS.

Dairymen, Cowkeepers Registered	10
Number of Cowsheds	17
„ Cows (approximate)	144
„ Milkshops on Register	485
Inspection of Dairies, Cowsheds, and Milkshops	1728
Letters Drawing Attention to Contravention of Regulations	5
Inspection of Ice-cream Stores, Shops, or Stalls	476

TABLE 14.
OFFENSIVE TRADES.

The Offensive Trades carried on in the Town are as follows :—

Chemical Works	1
Fish Curing Houses	4
Fish Frying	114
Gut Scraping Houses.....	2
Marine Stores.....	26
Oil and Grease Works	4
Paint Works	2
Skin Warehouses	3
Tallow Melting Works	1
Tripe Preparers	8
Total ..	165

TABLE 15.
FACTORIES, SHOPS, AND WORKSHOPS.

The following work has been performed by the Inspector appointed for this purpose.

INSPECTIONS AND ENQUIRIES.	
Factories	368
Workshops	925
Workplaces	165
Restaurant Kitchens.. ..	49
Domestic Workshops	56
Laundries... ..	14
Outworkers, Home.....	342
„ Employers of	41
Bakehouses :—	
Wholesale	10
Retail	435
Domestic	76
Shop Hours' Act, 1912, Visits	3206
„ „ Enquiries from Proprietors	656
„ „ Enquiries from Assistants . . .	1305
„ „ Complaints Investigated.....	6
Under Housing, Town Planning, etc....	31
Rag Flock Act, 1911, Samples.....	5
Other Visits.....	64
Total Inspections	7754

TABLE 16.

Shewing the Notices, &c., served by the Inspector
of Shops and Workshops.

To Cleanse or Limewash Factories	2
" " Workshops	30
" " Workplaces	3
" " Bakehouses	32
" " Restaurant Kitchens..	3
" " Sanitary Conveniences	12
To abate Nuisances from :—	
" Defective Sanitary Conveniences ...	13
" " Yard Pavement	1
" " Bakehouse Floors	4
" " Yard Drains.....	8
" " Walls, Floors, Ceilings, Roofs, Spouts, etc. ...	7
" " Gas Stoves	2
" " from Dirty Yards	5
" " " Accumulations of Trade Refuse	5
" " " Accumulations of Manure	6
" Overcrowding	3
To provide Suitable and sufficient Sanitary Conveniences	12
" Separate Sanitary Conveniences for Sexes	3
" Partitions to Trough Closets	3
" Additional Light to Conveniences ...	4
" Screens to Sanitary Conveniences...	9
" Intervening Spaces to Sanitary Conveniences.....	3
" Ventilation to Bakehouses	2
" Proper Drainage for Workshop floors	2
" Proper Manure Receptacle	1
" Lists of Outworkers	138
To Display Abstract, Factory and Workshop Act	23
Notices <i>re</i> Irregularities under the Shops Act, 1912	168
Reports to H.M. Inspector of Defects Remedied	72
" Other Authorities (Outworkers) ...	22
" Chief Inspector.....	15
" Borough Surveyor.....	12
" Cleansing Superintendent	4
Totals.....	629

TABLE 17.

[illegible]

TABLE 18.

FACTORY AND WORKSHOPS ACTS

Showing the Number of Registered **Factories** in the Borough.

FACTORIES	No.	FACTORIES.	No.
Ale Bottlers	6	Joiners	26
Artificial Stone Makers	1	Laundries	8
Bakers	5	Lead Glazing	1
Bicycle Maker	1	Millers	3
Block and Mast Maker	1	Mineral Water Manufacturers	6
Boat Builder.....	1	Metal Broker	1
Bookbinders	3	Model Makers	2
Boot and Shoe Makers	11	Motor Car Builder	1
Bottle Maker	1	Organ Builder	1
Box Maker	1	Paint Manufacturers	2
Brass Founders	7	Paper Bag Makers	2
Brewers.....	6	Patternmaker	1
Brick Makers	2	Picture Frame Maker.....	1
Brush Maker	1	Potters	2
Cabinet Makers	7	Plumbers	5
Carriage Builders	2	Preserve Makers	2
Carver	1	Printers.....	32
Cattle Spice Maker	1	Rope Manufacturers	6
Cement Block Maker	1	Sail and Flag Makers.....	3
Cement Manufacturer	1	Sausage Makers	2
Compass Makers	4	Sculptor	1
Coppersmith	1	Shipbuilders and Repairers.....	12
Dry Docks.....	2	Ships' Lamp Makers	2
Dyer	1	Steel Manufacturers	3
Electrical Engineers	3	Steering Wheel Maker	1
Electricity Works	3	Stocking Knitter.....	1
Engineers	26	Stone Dressers.....	3
Electro Plating	1	Sugar Boiling	1
File Maker	1	Tent Maker.....	1
Finings Manufacturer	1	Test Works	1
Firewood Factories	2	Timber Sawyers	8
Galvanizer.....	1	Tobacco Manufacturer	1
Gas Manufacturers.....	2	Whiting Manufacturer	1
Glass Manufacturers	2	Window Blind Maker.....	1
Glass Marker ...	1	Wood Turners	2
Ironfounders.....	8		

TABLE 19.

Showing the Number of Registered Workshops, Nature of Trades,
and Number of Employees.

TRADES.	Number of each.	Em- ploying		TRADES.	Number of each.	Em- ploying.	
		Males.	Females.			Males.	Females.
Bakers and Confectioners..	89	40	198	Paper Bag Makers	1	...	2
Bicycle Makers.....	6	12	...	Piano Repairers	1	4	...
Blacksmiths	16	50	..	Pickle and Sauce Manu- facturers	2	...	20
Block and Mast Makers...	3	3	...	Picture Frame Makers ...	7	13	1
Boat Builders	2	12	...	Pipe Makers.....	2	5	4
Botanical Brewers	1	4	..	Plasterers	2	16	...
Boot and Shoe Makers ...	51	76	...	Plumbers	22	170	...
Brush Makers	2	5	17	Rope Maker	2	8	...
Cabinet Makers	19	73	...	Sculptors	7	25	...
Cartwrights	8	32	...	Stocking Knitters	3	...	10
Coach Builders	2	16	...	Sugar Boilers	2	10	5
Coopers	4	13	...	Tailors	56	210	170
Dentists	2	26	..	Tinsmiths	6	11	...
Disinfectant Maker.....	1	4	...	Umbrella Makers	1	1	1
Electrical Engineers	1	3	...	Upholsterers	10	50	28
Engravers	2	12	...	Watchmakers	12	30	...
French Polishers.....	7	17	5	Water Proof Manufacturer	1	2	...
Harness Makers	8	23	...	Weighing Machine Maker	2	5	...
Horse Shoers	9	20	...	Window Blind Maker ...	1	1	...
Joiners	45	180	...	Wire Workers	2	3	...
Mattress Makers	2	32	10	Wood Carver.....	2	8	...
Milliners and Dressmakers	108	...	1160				
Model Makers	7	8	...				
Motor Repairers	1	2	...				
				Totals	564	1235	1631

TABLE 20.
SHOWING THE NUMBER OF DOMESTIC WORKSHOPS.

Nature of Business.	Number of each.
Bakers and Confectioners	57
Bicycle Makers	1
Boot and Shoe Repairers	20
Cloggers	2
Coopers	1
Dressmakers	12
French Polishers	2
Joiners	6
Laundries	1
Locksmith.....	1
Mattress Maker	1
Picture Frame Maker	1
Stocking Knitter.....	1
Tailors	6
Tinsmiths	2
Toymakers	1
Watchmakers	4
Total	119

TABLE 21.
SHOWING THE NUMBER OF WORKPLACES.

Nature of Business.	Number of each.
Ale Bottler	1
Auctioneer	1
Bottle Exchange	1
Builders' Merchants	4
Florists	5
Haulage Contractors	5
Laundries.....	3
Mews.....	30
Oil Works.....	1
Photographers	12
Pottery Warehouse.....	1
Painters	1
Restaurant Kitchens	32
Slaters	3
Salt Packers.....	6
Shipchandlers	2
Sign and Ticket Writers	2
Timber Merchants	1
Warehousemen.....	2
Wharfingers	4
Sundries	3
Total	120

TABLE 22.

Showing the Number and Nature of Irregularities dealt with
under the SHOPS ACT, 1912.

Failure to Display Shop Assistants Weekly Half-Holiday List.....	188
„ „ Closing Notice °.....	522
„ „ Notice as to Employment of Young Persons	85
„ Observe Interval for Meals.....	25
„ „ Half-Holiday	17
„ Close	10
„ Display Correct Holiday Lists	60
	970

TABLE 23.

RAG FLOCK ACT, 1911.

Articles Analysed.	No. Analysed	Result of Analysis.		Extent of Adulteration.	Action taken.
		Gen- uine.	Adult- erated.		
Flock.....	5	3	2	Contained 158 parts per 100,000 soluble Chlorine as Chlorides.....	Paid Costs (£2/1/4)
				Contained 42 parts per 100,000 soluble Chlorine as Chlorides.	Letter of Caution.

TABLE 24.
WORK OF DISINFECTOR.

Articles.	Disinfected.	Destroyed.	Premises Disinfected.	No.
Beds.....	983	11	School Class Rooms	28
Mattresses	296	9	School Cloak Rooms	7
Blankets..	1163	1	Sanitary Conveniences...	54
Pillows	1655	4	Rooms of Dwelling	
Quilts	1131	1	Houses	1715
Sheets.....	758	1		
Bolsters	866	2		
Shawls	98	1		
Carpets.....	96	...		
Sundries.....	1376	...		
Totals	8422	30		1804

Number of Visits in connection with Infectious Disease	56
„ Patients removed to Borough Sanatorium	571
„ „ „ Otherwise	17
„ Library Books Disinfected.....	267

TABLE 25.
ANALYSIS OF FOOD AND DRUGS.

Articles Analysed.	No. Analysed.	Result of Analysis.		Extent of Adulteration.	Action taken.
		Genu- ine.	Adul- terated.		
Milk	150	124	26	{ 20 per cent. def. in Milk fat.. 12.4 " " non-fatty " " solids..... 11.6 " " Milk fat 3.3 " " " 13.3 " " " 3.3 " " " 2.3 " " non-fatty " " solids..... 5.9 " " " 13.3 " " Milk fat 21.7 " " " 5.0 " " " { 8.3 " " " 4.6 " " non-fatty } " " solids ... } 3.3 " " " 16.6 " " " { 10.0 " " " 13.2 " " non-fatty } " " solids ... } 6.6 " " Milk fat 5.0 " " " 7.6 " " non-fatty " " solids..... { 3.3 " " Milk fat } 12.7 " " non-fatty } " " solids ... } 5.0 " " Milk fat 8.3 " " " 4.9 " " non-fatty " " solids..... 3.3 " " Milk fat 13.3 " " " 6.6 " " " 2.3 " " non-fatty " " solids..... 3.3 " " Milk fat	Fined 10/- and costs Dismissed. Letter of Caution. Dismissed. Letter of Caution. do. do. Dismissed. do. Letter of Caution. Fined £2 and costs Letter of Caution. Dismissed. Fined £3 and costs Letter of Caution. do. Dismissed. do. Letter of Caution. do. do. do. do. Fined 20/- and costs Letter of Caution. do. do.
Camphorated Oil.....	1	...	1	Contained Mineral Oil instead of Olive Oil and deficient in Camphor 50 per cent.	Fined 20/- and costs See inf. sample††
Butter	2	2	...		
Magnesia	1	...	1	Contained :— Magnesium Sulphate.. 1.3 Sodium Bi-carbonate.. 27.1 Citric Acid..... 20.6 Sugar and Moisture... 51.0	Letter of Caution. See inf. sample†
Dripping	1	...	1	Contained at least 40 per cent. Cotton Seed Oil or Stearine	Dismissed. See inf. sample‡
Coffee	1	...	1	Contained 79 per cent. Chicory	Dismissed. See inf. sample*
Totals	156	126	30		

TABLE 26.
ANALYSIS OF FOOD AND DRUGS.
INFORMAL SAMPLES.

Articles Analysed.	No. Analysed.	Result of Analysis.		Extent of Adulteration.	Action taken.
		Gen- uine.	Adult- erated.		
Butter	31	31	...	Contained Mineral Oil in place of Olive Oil with which it should have been made. See Formal Sample††	
Lard	17	17	...		
Margarine	5	5	...		
Linseed Oil	3	3	...		
Camphorated Oil.....	6	5	1		
Licorice Powder	8	8	...	Contained 3 parts Calcined and 2 parts Carbonate Magnesia	
Gregory Powder	12	11	1		
Cream (Preserved) ...	3	3	...		
Seidlitz Powder	6	6	...		
Citric Acid	3	3	...		
Acetic Acid	1	1	...		
Cream of Tartar	2	2	...		
Borax	1	1	...		
Tartaric Acid	2	2	...		
Magnesia	5	3	2		
Cod Liver Oil	1	1	...	Contained 4 per cent. Mag- nesia, rest Soda Bi-carbonate, Citric Acid and Sugar. Contained only 40 per cent. Calcined Magnesia, rest Car- bonate and Moisture. See Formal Sample†	
Castor Oil.....	9	9	...		
Saffron	1	1	...		
Dripping	7	6	1		
Cheese	3	...	3	Contained 30 to 40 per cent. Cotton Seed Oil. See Formal Sample‡ Contained respectively 10·5, 3·1, 5·1 of fat, far below what Cheese should contain.	
Baking Powder	14	14	...		
Fruit Wine (Black Currant)	1	...	1	Found to be a weak solution of Glucose and some colouring and flavouring material.	
Butter (Fresh).....	6	6	...		
Sausage.....	8	2	6	Contained 0·69, 0·41, 0·26, 0·30, 0·46, 0·27, per cent. Boric Acid.	
Cocoa	5	5	...		
Coffee ..	6	...	6	Contained 37, 40, 49, 56, 30, and 76 per cent. Chicory. See Formal Sample*	
Mustard	6	6	...		
Pepper	6	6	...		
Jam	3	3	...		
Syrup	1	1	...		
Totals	182	161	21		

TABLE 27.

MAGISTERIAL PROCEEDINGS.

Particulars of Complaints.	No.	How disposed of.
Adulterated Milk	11	7 Dismissed. 1 Fined 10/- and costs. 1 „ £2 „ 1 „ £3 „ 1 „ £1 „
Camphorated Oil containing Mineral Oil instead of Olive Oil and deficient 50 per cent. in Camphor ...	1	Fined £1 and costs.
Rag Flock containing excess of soluble chlorine as chlorides	1	Paid Costs (£2 1s. 4d.)
Dripping containing at least 40 per cent. Cotton Seed Oil	1	Dismissed.
Coffee containing 79 per cent. Chicory	1	Do.
Washhouse pavement out of repair...	1	Withdrawn on payment of costs (abated)
Yard pavement out of repair	2	1 Abated—case withdrawn. 1 Abatement Order made to Abate in 1 month.
Back eave spouts out of repair.....	2	Withdrawn on payment of costs.
Unwholesome premises	1	Abate in 14 days, also fined 2/6 and costs.
Pigeons a nuisance.....	1	Dismissed.
Dilapidated house	2	Withdrawn on payment of costs (Nuisances abated).
Insanitary conveniences & approaches	1	Dismissed.
Failure to notify Infectious Disease in house	2	Fined 10/6 in each case.
Selling Fish during Prohibited hours.	1	Fined 5/- and costs.
Failure to display Shop Assistants' Half-Holiday List	1	Fined 20/- and costs.

TABLE 28.

Summary of the Houses dealt with under the Housing, Town Planning, &c., Act, Section 17, showing the principal items of repairs, &c., carried out thereat.

SITUATION OF PREMISES.	REMARKS.
54, Burleigh Street ...	An offshoot building two storeys high has been pulled down and the site given up for yard space. New windows provided in back rooms, new floors and ceilings in three rooms; chimney, roofs, and walls repaired, attic stairs removed and attics sealed up; all the windows made to open.
28, Spring Garden Lane...	Attic rooms discontinued for use and staircases thereto removed. New partitions and new floor provided, and staircase altered with the addition of more light thereto. Two new ceilings, and sundry repairs, including all windows, being made to open.
4-4½, Warren Street ...	One half of this house has been pulled down and given up as yard space. New w.c. erected with new drains, etc., rooms provided with additional light, new floors, partitions, etc.
182, High Street East ...	A four-storey building offshoot at the rear has been pulled down and the site given up as additional yard space, which affords light to staircase and back rooms. The attic rooms (3) have been closed and the staircase removed; new w.c. erected in the yard and new floors and ceilings provided. The external wall (North) rendered in cement.
89, High Street East ...	A three-storey building, including baker's oven, situated at the rear, has been pulled down and the space given up for yard, and two new water-closets for this house and No. 88 provided.
88, High Street East ...	A building in the rear used as a slaughterhouse pulled down and the site given up for yard space, additional staircase provided to second floor rooms, small dark room on first and second floors done away with, new landing windows provided, attic rooms discontinued and old staircase removed giving more ventilation, etc., new floors, ceilings, and general repairs.

TABLE 28—Continued.

SITUATION OF PREMISES.	REMARKS.
2½, Vine Street	A three-storey offshoot building pulled down, affording additional light and ventilation to staircase, and ground floor rooms; new windows, floor, and ceiling; repairs to roof, spouts, and chimney. A large room (Mission Room) formerly bar and sitting rooms of licensed premises.
3, Vine Street	Premises generally repaired, and in connection with No. 2½ has been improved by the demolition of building, and high wall-party walls which obstructed the light and ventilation.
20, Vine Street	A three-storey building at the rear pulled down and the site given up for yard space, affording more light and ventilation to this and the adjoining dwellings; new windows provided to ground floor rooms, old staircase and attic room dispensed with, new floor, ceilings and general repairs, including roof, etc.
4, Vine Street	Four rooms, viz., two on ground floor, and two on the first floor, have had enlarged windows provided, the staircase too has had windows provided. The floors, walls and roofs repaired, and the external wall rendered with cement.
45, Vine Street	A three-storey building offshoot at the rear has been demolished and given up as yard space. New window frames fixed, also new floors, ceilings, and doors; roof thoroughly overhauled and repaired. Attic stairs removed and new drainage and general repairs.
34, Burleigh Street	Building one storey high at the rear pulled down and the space given up for yard. New windows at the back provided, cellars built up and filled in with builders' rubbish; repairs to walls, floors, etc.
35, Burleigh Street	A two-storey building offshoot pulled down, affording additional light and ventilation; additional windows provided to ground floor room; walls, floors and ceilings repaired.
36, Burleigh Street	An offshoot building at the rear pulled down, enlarging the yard space and affording additional light and ventilation to the ground floor rooms; new windows provided, and sundry general repairs.

TABLE 28—Continued.

15, Hartley Street and 31, Nesham Square ...	The premises in Hartley Street have been pulled down, a licensed public-house, and also buildings between the site given up as additional yard space which also affords more light and ventilation to this and the adjoining houses; new outoffices, drainage, etc.
15, Harrison Street ...	Old floors taken up, earth removed from below, and new floors relaid; a light provided to staircase, windows repaired and made openable, internal walls repaired, also roof, fireplace, and spouts.
16, Harrison Street ...	A dilapidated building at the rear has been cleared away forming a yard; new floor (ground floor) laid, repairs to other floors, windows, roof, walls, etc.
17, Harrison Street, 17, Back Harrison Street..	Old floors taken up and the ground floor excavated, new floors laid, with ventilation below, also new floor to first floor rooms; new partitions and ceilings; new window frames, and repairs to roof, walls, fireplaces, etc., covered ashpit and privy converted to w.c. and ashpan; new drains laid.
10, Gerald Street ...	Ground floors have been relaid, also internal walls repaired. Attic rooms have been provided with additional windows, made openable, admitting of thorough ventilation. Roofs, spouts, etc., repaired.
83, Church Street North...	Two two-storey offshoot buildings in the rear have been pulled down, giving additional yard space and ventilation, and an area formed for the ground floor rooms; new additional windows have been provided. New floors in two rooms, new ceilings and general repairs to other parts of the house.
33, Vine Street ...	A one-storey building at the rear has been pulled down, giving additional yard space; light and ventilation, new and additional windows provided, all windows made openable, new floors, and repairs to walls, ceilings, roof, etc.
119, Church Street North.	A large two-storey offshoot building pulled down, giving additional light and ventilation to the back rooms and staircase, part yard cemented, attic rooms discontinued, and staircase removed; roofs, walls, and floors repaired.

TABLE 28—Continued.

SITUATION OF PREMISES.	REMARKS.
24½, Hopper Street ...	Old roof taken off and new roof, including new timbers, provided, floors taken up and earth excavated from beneath and new floors relaid, also new ceilings and external walls, fireplaces, and other general repairs.
25, Hopper Street ...	Old roof taken off and new roof, including new timbers, provided, floors taken up and earth excavated from beneath and new floors relaid, also new ceilings and external walls, fireplaces, and other general repairs.
40-41, Huddleston Street	A large two-storey building used as a workshop pulled down and the space given up as yard area; an offshoot room has had the wall thickened from 4½ in. to 12 in. New floors laid and new window frames, partitions and ceiling to main building. Attic room sealed up, dormer windows removed, and roof, walls and yard repaired.
17, Moor Terrace (Adelaide Place) ...	A large warehouse with cellars at the rear of this house and the adjoining houses, Nos. 17, Cousin Street and 18, Moor Terrace, has been pulled down, and also a large chimney stack. The space has been given up to form separate yards for each house, with new water-closet drains, and with separate and direct entrance from each tenement. Internal repairs carried out, consisting of new floors and additional windows, also repairs to roofs, chimneys, etc.
18, Moor Terrace (Adelaide Place) ...	
17, Cousin Street ...	
7, Hodgkin Street ...	Part of the house at the back, three storeys high, pulled down and given up as yard space. New floors, ceilings, windows and partitions provided. Numerous small repairs to the house, including roof and chimney. One gable has been partially rebuilt and the cellars filled up.
39, Hope Street ...	Demolished voluntarily.
40, Hope Street ...	Demolished voluntarily.
18, Flag Lane ...	Two-storey building at the rear pulled down and site given up for yard, the surface of which is cemented. New washhouse provided. General repairs to roof, floors, walls, ceilings, etc.
19, Flag Lane ...	Two-storey building at the rear pulled down and site given up for yard, the surface of which is cemented. New washhouse provided. General repairs to roof, floors, walls, ceilings, etc.

TABLE 28—Continued.

SITUATION OF PREMISES.	REMARKS.
20, Flag Lane	A two-storeyed building behind this house has been pulled down and site given up for additional yard space; new windows provided and general repairs to the house.
21-21½, Flag Lane	A three-storey offshoot building pulled down and site given up for additional yard space. New ceilings, floors, and windows, repairs to walls, fireplaces, roof, etc.
22, Flag Lane	A three-storey offshoot building at the rear pulled down and the site given up as additional yard space, new additional windows provided, roof, floors, walls and ceilings and other repairs carried out.
33, Lawrence Street	A large building in the yard has been pulled down and the site given up for yard space, which has been cemented. A new roof has been provided. Attic rooms dismantled and sealed up. Repairs to walls, floors, and windows, and outer walls of offshoot building rendered with cement.
61, Moor Street	A two-storey building at the rear pulled down and the site given up as yard space. New additional windows provided to the back rooms and staircase and general repairs to the house and shop.
60, Moor Street, 12, Pemberton Street	A new staircase from the upper tenements into the yard. Additional windows to existing staircase and passages. Repairs to roofs, windows and floors.
26, Hanover Place	The area at the rear has been enlarged, affording additional light and ventilation to the back rooms on first floor. Two rooms at the back on ground floor have been built up. New wall built dividing the rooms, also new floors and windows, new w.c. erected and general repairs to floors, walls and roof.
35, Hanover Place	Part of the house two storeys high pulled down and given up as yard space, one room on the ground floor has been built up, new staircases to first floor rooms, and general repairs.
11, Mount Pleasant	Outbuildings and yard walls taken down and re-erected; light provided to staircase. Ceilings and walls re-plastered. Floors and staircase repaired,

TABLE 28—Continued.

11, Burleigh Street	...	A three-storey offshoot building pulled down and given up for additional yard space, affording additional light and ventilation to this and adjoining houses. New windows, ceilings, floors and general repairs to walls, chimney and roof.
12-13, Burleigh Street	...	A three-storey offshoot pulled down, also part of the house, giving additional yard space and light and ventilation to the adjoining houses. New gable wall, new and additional windows provided, new ceilings, attic rooms discontinued and abolished. General repairs to walls, floors, roof and chimney.
38, Burleigh Street	...	An offshoot building at the rear pulled down and given up for yard space; attic rooms closed and staircase removed. New and additional windows provided and generally repaired.
27, Vine Street	... ..	A two-storey building in the yard has been pulled down and given up as additional yard space, affording more light and ventilation to the ground floor rooms. New roof, partition, walls and floors; all windows re-hung and made to open. Repairs to fireplaces, stairs, walls, etc.
28, Vine Street	... ..	Additional windows provided to ground floor room. New ceiling and floor; repairs to roof, spouts, walls and staircases.
1, Northumberland Place.		New windows provided, floors taken up, the earth excavated from below and new floors re-laid, one room offshoot made into a wash-house. The walls of another offshoot thickened from 4½ in. to 12 in. The roof and chimneys repaired and other general repairs.
26, Zion Street	... ..	Part of the house three storeys high pulled down, the site given up as additional yard space, new windows, floors, and partitions and ceilings. The attic rooms discontinued and stairs removed, also dormer window, roof, chimney, and general repairs.
116, Church Street North.		A large two-storey building at the rear has been partially demolished, affording additional light and ventilation. New front and back walls with new roof, floor and ceiling, additional light and ventilation, new front and back walls, with new roof, floor and ceiling, additional and enlarged windows and general repairs to staircase, fireplace, etc.

TABLE 28—Continued.

SITUATION OF PREMISES.	REMARKS.
115, Church Street North.	A large two-storey building in the rear pulled down and part given up as additional yard space. New windows and ceiling provided. Attic rooms have been abolished and the staircase removed and general repairs.
108-109, Church Street North and Cottage in Yard	Room with borrowed light abolished. New ceilings and division walls. Cellars filled in with builders' rubbish; outer walls rendered with cement. Roofs, chimneys, and windows repaired.
19-20, Hanover Place and 20, Back Hanover Place...	The lower part of these buildings, hitherto used as shops, with a dwelling room at the rear, being semi-basement, have been discontinued, the doorway and window built up, leaving the rooms on second and third floors only as dwelling rooms. These have been thoroughly repaired and put into good habitable condition.
12-13-14, Hanover Place ...	A two-storey building at the rear has been pulled down, and the site given up as additional yard space, affording additional light and ventilation. New back staircase provided, new fireplace, all windows repaired and rehung. Roofs, floors and ceilings repaired.
50, Vine Street	A two-storey offshoot pulled down, giving additional yard space, light, ventilation, and additional windows provided to attic rooms. Floors, ceilings, windows, roof, etc., generally repaired.
51, Vine Street	A three-storey offshoot pulled down and the site given up as additional yard space; new floors and ceilings provided. Repairs to windows, roof, walls, and fireplaces, and sundry general repairs.
45, Flag Lane	New windows, ceilings, floors, and fireplaces. Repairs to roof, chimney, and walls. An outbuilding in front of the house has been pulled down and the site given up to the public.
2, Hartley Street ...	New gable wall built and external walls rendered with cement, roof and spouting repaired; attic room discontinued and sealed up, walls, ceiling and floors repaired.
3, Hartley Street ...	External walls rendered with cement. New ceilings to two rooms, internal walls replastered, and window, floor, etc., repaired.

TABLE 28—Continued.

18, Vine Street	...	...	A one-storey building at the rear pulled down and given up as additional yard space, water-closet taken down and rebuilt. Floors, windows, ceilings, walls and roof repaired. Attic rooms discontinued and staircase removed.
19, Vine Street	...	...	A one-storey building at the rear pulled down and the space given up for additional yard space. Repairs to floors, walls, windows, ceilings and roof. Attic rooms discontinued and staircase removed. Slop w.c. abolished and an ordinary w.c. provided.
42, Silver Street	...	...	A large three-storey building at the rear pulled down and the site given up as yard space, new gable wall built, attic rooms discontinued, all windows rehung. Roof, walls, floors, ceiling and staircase repaired.
43, Silver Street	...	...	Part of a three-storey building pulled down and given up as additional yard space, new windows, floors and ceilings provided, also roofs, spouts, etc.
13, Hardwick Street	...	...	A two-storey offshoot building partially pulled down and re-roofed; light to staircase provided. Repairs to walls, ceilings, and floors, all windows repaired and rehung.
14, Hardwick Street	...	...	A two-storey offshoot building partially pulled down and re-roofed; light to staircase provided. Repairs to walls, ceilings, and floors, all windows repaired and rehung.
11, Barrington Street	...	...	An additional $4\frac{1}{2}$ in. wall built against an offshoot building to prevent dampness. New windows and new floors provided.
8-9, Huddlestons Street	..	...	Ground floors taken up, the ground excavated, and new floors laid. New window frames provided, fireplaces and grates renewed, new ceilings to two rooms. New staircase from upper tenements to yard provided and general repairs to roof, spouts, outer walls, etc., and a new yard drain provided.
7, Flag Lane	...	...	Two attic rooms have been discontinued and sealed up; new staircase formed, with new floors, ceilings and windows. Roofs, spouts, and outer walls repaired.
8, Flag Lane	...	...	Attic rooms discontinued and built up; walls, roof, floors, and ceilings repaired and a new staircase from first floor to the yard provided, to give tenants access to a yard, etc.

TABLE 28—Continued.

SITUATION OF PREMISES.	REMARKS.
9, Flag Lane 	New floors and partition walls, with repairs to roof, fireplace, windows and ceiling.
10, Flag Lane 	A two-storey building partially pulled down, giving an increased yard space. New windows, floors and ceilings provided, re-roofed, main building and repairs to fireplaces, walls, etc.
11, Flag Lane 	A two-storey building at the rear partially pulled down, giving an enlarged space; new windows, floors, and ceilings provided. New w.c. erected. Repairs to roof, walls, fireplace, etc.
26, George Street East ...	A two-storey building at the rear partially pulled down, giving additional yard surface, light and ventilation, and new windows provided. Attic rooms discontinued, and repairs to roof, floors, walls and staircase, etc.
27, George Street East ...	A two-storey building at the rear partially pulled down, giving additional yard surface, light and ventilation, and new windows provided. Attic rooms discontinued, and repairs to roof, floors, walls and staircase, etc.
28, George Street East ...	A building at the rear pulled down, giving additional yard space. Back wall taken down and rebuilt. New ceiling and partitional walls; repairs to floors, windows and fireplace.
31-31½, George Street East	A three-storey building in the rear has been pulled down, and the site given up as additional yard space. New windows to back rooms, light to staircase. General repairs to roof, walls, floors, etc., and new stoves provided.
5, East Street 	An offshoot building two-storeys high has been reduced to one storey, and the lower storey discontinued as a living room and converted into a washhouse. Repairs to floors, ceilings, walls and fireplaces.
45-46, East Street ...	An offshoot building two-storeys high has been reduced to one storey, and the lower storey discontinued as a living room and converted into a washhouse. Repairs to floors, ceilings, walls and fireplaces.

TABLE 28—Continued.

47, East Street	An offshoot building two-storeys high has been reduced to one storey, and the lower storey discontinued as a living room and converted into a washhouse. Repairs to floors, ceilings, walls and fireplaces.
87, Whitburn Street, 88, Whitburn Street, 1, Charles Street North ...	A two-storey building pulled down, giving additional yard space. New sanitary conveniences erected; one room shop reconverted into a dwelling room and a small room (shop) converted into a washhouse. New windows to staircase and general repairs to roof, floors, etc.
43-44, George Street East.	A two-storey building at the rear pulled down, affording additional light, ventilation, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
41-42, George Street East.	A two-storey building at the rear pulled down, affording additional light, ventilation, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
39-39½, George Street East	A two-storey building at the rear pulled down, affording additional light, ventilation, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
38-38½, George Street East	A two-storey building at the rear pulled down, affording additional light, ventilation, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
29, New Grey Street ...	A two-storey room at the rear has been pulled down, and space given up for additional yard space. New windows to ground floor room. Attic rooms discontinued and staircase removed. Repairs to roof, chimney, floors, and staircase.
30, New Grey Street ...	A two-storey room at the rear has been pulled down, and space given up for additional yard space. New windows to ground floor room. Attic rooms discontinued and staircase removed. Repairs to roof, chimney, floors, and staircase.
10, Walton Place ...	A three-storey building at the rear has been pulled down and given up for yard space. New staircase provided, also new floors and ceilings. Yard cemented, washhouse provided, and sundry repairs to windows, roof, etc.

TABLE 28—Continued.

11, Walton Place	...	A two-storey building pulled down, affording additional yard space and ventilation. Washhouse provided by the conversion of a one-storey living room for this purpose. Yard cemented, new ceilings and repairs to windows, roofs, walls, etc.
26, Coronation Street	...	A two-storey building pulled down, affording additional yard space, light, and ventilation; repairs to roof, wall, and ceiling.
27, Coronation Street	...	A large wooden erection and staircase demolished, affording additional yard space, light and ventilation. New and additional windows provided, new floor and repairs to ceiling, etc. New w.c. erected; drains, etc., repaired.
25, Flag Lane	... ..	Part of a two-storey building pulled down, giving additional yard space, also more light and ventilation to ground floor rooms; new outside staircase provided. Yard cemented and drains relaid. External walls rendered with cement. General repairs to floors, ceiling and roof.
26-26½, Flag Lane	...	A large one-storey building at the rear pulled down, giving additional yard space, also more light and ventilation to ground floor rooms. New outside staircase provided. Yard cemented and drains relaid. External walls rendered with cement, and general repairs to floors, ceiling and roof.
6, Back Dundas Street	...	External walls rendered in cement, new floors, ceiling and partition walls. New and additional light to staircase and sundry repairs to roof, spouts, etc.
38, Silver Street	... ..	A three-storey building in the rear pulled down, giving yard space, light and ventilation. New w.c. erected, and pavement cemented. Cellars built up, new gable built, and general repairs to walls, roof, floors, etc.
14, New Grey Street	...	A two-storey building situated between this house and No. 33, Golden Alley has been pulled down, and the space given up for yard. New floors and ceilings and new windows, repairs to walls, roof, etc.
33, Golden Alley	... ..	A two-storey building situated between this house and No. 33, Golden Alley has been pulled down, and the space given up for yard. New floors and ceilings and new windows, repairs to walls, roof, etc.

TABLE 28—Continued.

SITUATION OF PREMISES.	REMARKS.
2, Covent Garden Street...	A building in the yard pulled down and given up as additional yard space. New windows, floors, and ceilings provided. Repairs to staircase, walls and roof. Attic stairs removed and sealed up.
3, Covent Garden Street...	A three-storey offshoot building in the rear pulled down, giving additional light and ventilation. New floors and ceilings, passage cemented, roof, chimney, etc., repaired. Attic rooms discontinued, and staircase thereto removed.
5, Covent Garden Street...	A three-storey offshoot building in the rear pulled down, giving additional light and ventilation. New floors and ceilings, passage cemented, roof, chimney, etc., repaired. Attic rooms discontinued, and staircase thereto removed.
6, Zion Street	A one-storey building at the rear pulled down, giving additional yard space, light and ventilation. Attic rooms discontinued, and old stairs removed. Windows, floor, roof, and chimney repaired.
10, Lilburne Street ...	A two-storey building in the rear lowered, one storey affording light and ventilation to the staircase. A 4½ in. wall has been added to the external wall, making a 12 in. cavity wall. New ceiling to ground floor room, and all windows made to open.
10, Covent Garden Street.	A two-storey building in the rear pulled down, giving additional yard space, light and ventilation. Attic rooms sealed up and staircase removed, new windows provided, and general repairs carried out.

